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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1983

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

SECOND SESSION

Printed for the use of the Committee on Appropriations

PART 1—Budget Overview (Pages 1–645)

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Department of the Army
Department of the Navy
Department of the Air Force

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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1983

TUESDAY, MARCH 2, 1982

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:10 a.m., in room 1223, Everett McKinley Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Andrews, Rudman, and Stennis.

DEPARTMENT OF DEFENSE

SECRETARY OF DEFENSE

STATEMENTS OF:

HON. CASPAR W. WEINBERGER, SECRETARY OF DEFENSE

GEN. DAVID C. JONES, USAF, CHAIRMAN, JOINT CHIEFS OF STAFF

ACCOMPANIED BY DR. JACK R. BORSTING, ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

OPENING STATEMENT OF SENATOR STEVENS

Senator STEVENS. Good morning. We are here today to hear from the Secretary of Defense and the Chairman of the Joint Chiefs of Staff on the Nation's defense posture.

This hearing will also take the form of a budget overview because there are so many critical budget issues to be discussed and these budget issues are vital to the entire defense posture question.

BUDGET REQUEST

For programs funded in the Defense appropriations bill, the fiscal year 1983 budget request totals $245.7 billion in budget authority and some $205.2 billion in outlays. The budget authority request is a $46 billion increase over appropriations to date for the current fiscal year, but we should observe that the President has a $2.1 billion program supplemental pending, and we are told there will be a $5.4 billion pay supplemental for the fiscal year 1982 coming along soon.

COMPARISON TABLE ON BUDGET AUTHORITY

For the record, and if there is no objection, we will insert a table of comparison of the budget authority displaying the President's 1983 request and the 1982 appropriations to date, together with a request for the 1982 program supplementals. The pay supplemental is expected to total $4.1 billion, but it is not included in the table because it has not yet been transmitted to Congress.

[The table follows:]

Comparative Statement of New Budget (Obligational) Authority (including Proposed Supplementals)

	FY 1982 Enacted	Proposed Supplementals Pay Increase	Proposed Supplementals Program	Combined Enacted Amounts & Recmd Supplementals	FY 1983 Estimates	Estimates compared with Combined Enacted
TITLE I - MILITARY PERSONNEL						
Military personnel, Army	12,447,827,000	---	105,400,000	12,553,227,000	14,401,100,000	+1,847,873,000
Military personnel, Navy	9,117,956,000	---	154,200,000	9,272,156,000	10,578,900,000	+1,306,744,000
Military personnel, Marine Corps	2,766,966,000	---	50,700,000	2,817,666,000	3,276,100,000	+458,434,000
Military personnel, Air Force	10,305,414,000	---	28,300,000	10,333,714,000	12,031,400,000	+1,697,686,000
Reserve personnel, Army	964,400,000	---	9,400,000	973,800,000	1,224,800,000	+251,000,000
Reserve personnel, Navy	346,770,000	---	---	346,770,000	641,300,000	+294,530,000
Reserve personnel, Marine Corps	138,720,000	---	2,800,000	141,520,000	165,900,000	+24,380,000
Reserve personnel, Air Force	292,073,000	---	4,000,000	296,073,000	350,900,000	+54,827,000
National Guard personnel, Army	1,294,100,000	---	9,700,000	1,303,800,000	1,680,500,000	+376,700,000
National Guard personnel, Air Force	423,867,000	---	2,200,000	426,067,000	544,600,000	+118,533,000
Total, title I, new budget (obligational) authority, Military personnel	38,098,093,000	---	366,700,000	38,464,793,000	44,895,500,000	+6,430,707,000
TITLE II - RETIRED MILITARY PERSONNEL						
Retired pay, Defense	14,938,315,000	---	97,685,000	15,036,000,000	16,510,800,000	+1,474,800,000

Comparative Statement of New Budget (Obligational) Authority (including Proposed Supplementals)

	FY 1982 Enacted	Proposed Supplementals Pay Increase	Proposed Supplementals Program	Combined Enacted Amounts & Recmd Supplementals	FY 1983 Estimates	Estimates compared with Combined Enacted
TITLE III - OPERATION AND MAINTENANCE						
Operation and maintenance, Army	15,037,897,000	---	362,900,000	15,400,797,000	16,827,600,000	+1,426,803,000
Army stock fund	176,300,000	---	---	176,300,000	221,138,000	+44,838,000
Army conventional ammunition working capital fund	---	---	---	---	1,000,000	+1,000,000
Operation and maintenance, Navy	19,385,889,000	---	191,874,000	19,577,763,000	22,165,800,000	+2,588,037,000
(Liquidation of contract authority)	---	---	(43,641,000)	(43,641,000)	---	(-43,641,000)
(Transfer from other accounts)	---	---	(37,226,000)	(37,226,000)	---	(-37,226,000)
Navy stock fund	9,435,000	---	---	9,435,000	354,372,000	+344,937,000
Operation and maintenance, Marine Corps	1,185,540,000	---	25,300,000	1,210,840,000	1,481,800,000	+270,960,000
Marine Corps stock fund	13,334,000	---	---	13,334,000	11,812,000	-1,522,000
Operation and maintenance, Air Force	16,079,719,000	---	103,300,000	16,183,019,000	17,944,700,000	+1,761,681,000
Air Force stock fund	78,800,000	---	---	78,800,000	161,600,000	+82,800,000
Operation and maintenance, Defense agencies	4,985,400,000	---	61,200,000	5,046,600,000	5,755,400,000	+708,800,000
Defense stock fund	69,000,000	---	109,200,000	178,200,000	160,500,000	-17,700,000
Operation and maintenance, Army Reserve	658,150,000	---	800,000	658,950,000	686,400,000	+27,450,000
Operation and maintenance, Navy Reserve	570,940,000	---	200,000	571,140,000	653,000,000	+81,860,000
Operation and maintenance, Marine Corps Reserve	40,299,000	---	---	40,299,000	48,415,000	+8,116,000
Operation and maintenance, Air Force Reserve	669,154,000	---	600,000	669,754,000	766,300,000	+96,546,000
Operation and maintenance, Army National Guard	1,087,950,000	---	1,500,000	1,089,450,000	1,123,900,000	+34,450,000
Operation and maintenance, Air National Guard	1,646,418,000	---	1,400,000	1,647,818,000	1,761,800,000	+113,982,000
National Board for the Promotion of Rifle Practice, Army	845,000	---	---	845,000	875,000	+30,000
Claims, Defense	155,700,000	---	---	155,700,000	172,500,000	+16,800,000
Court of Military Appeals, Defense	2,607,000	---	---	2,607,000	3,210,000	+603,000
Total, title III, new budget (obligational) authority, Operation and maintenance	61,853,377,000	---	858,274,000	62,711,651,000	70,302,122,000	+7,590,471,000

Comparative Statement of New Budget (Obligational) Authority (including Proposed Supplementals)

	FY 1982 Enacted	Proposed Supplementals Pay Increase	Proposed Supplementals Program	Combined Enacted Amounts & Recomd Supplementals	FY 1983 Estimates	Estimates compared with Combined Enacted
TITLE IV - PROCUREMENT						
Aircraft procurement, Army	1,911,100,000	---	---	1,911,100,000	2,745,914,000	+834,814,000
Missile procurement, Army	2,131,200,000	---	---	2,131,200,000	2,846,600,000	+715,400,000
Procurement of weapons and tracked combat vehicles, Army	3,825,200,000	---	126,000,000	3,951,200,000	5,030,685,000	+1,079,485,000
Procurement of ammunition, Army	2,381,900,000	---	---	2,381,900,000	2,633,384,000	+251,484,000
Other procurement, Army	3,721,971,000	---	20,000,000	3,741,971,000	4,567,491,000	+825,520,000
Army National Guard Equipment	50,000,000	---	---	50,000,000	---	-50,000,000
Aircraft procurement, Navy	9,115,800,000	---	---	9,115,800,000	11,582,300,000	+2,466,500,000
Weapons procurement, Navy	3,207,100,000	---	---	3,207,100,000	3,901,600,000	+694,500,000
Shipbuilding and conversion, Navy	8,821,400,000	---	263,400,000	9,084,800,000	18,648,300,000	+9,563,500,000
Reappropriation	---	---	343,721,000	343,721,000	---	-343,721,000
(Transfer from other accounts)	(117,500,000)	---	---	(117,500,000)	---	(-117,500,000)
Other procurement, Navy	3,708,777,000	---	---	3,708,777,000	3,970,156,000	+261,379,000
Procurement, Marine Corps	1,711,456,000	---	20,000,000	1,731,456,000	2,300,700,000	+569,244,000
Aircraft procurement, Air Force	13,818,998,000	---	219,100,000	14,038,098,000	17,756,700,000	+3,718,602,000
(Transfer from other accounts)	(89,700,000)	---	---	(89,700,000)	---	(-89,700,000)
Missile procurement, Air Force	4,559,550,000	---	---	4,559,550,000	6,827,900,000	+2,268,350,000
Other procurement, Air Force	5,365,633,000	---	40,470,000	5,406,103,000	5,845,200,000	+439,097,000
(Transfer from other accounts)	(800,000)	---	---	(800,000)	---	(-800,000)
Procurement, Defense agencies	511,500,000	---	10,000,000	521,500,000	890,284,000	+368,784,000
Total, title IV, Procurement:						
New budget (obligational) authority	64,841,585,000	---	1,042,691,000	65,884,276,000	89,547,214,000	+23,662,938,000
(Transfer from other accounts)	(208,000,000)	---	---	(208,000,000)	---	(-208,000,000)

Comparative Statement of New Budget (Obligational) Authority (including Proposed Supplementals)

	FY 1982 Enacted	Proposed Supplementals Pay Increase	Proposed Supplementals Program	Combined Enacted Amounts & Recmd Supplementals	FY 1983 Estimates	Estimates compared with Combined Enacted
TITLE V - RESEARCH, DEVELOPMENT, TEST, AND EVALUATION						
Research, development, test, and evaluation, Army.....	3,609,535,000	---	---	3,609,535,000	4,484,000,000	+874,465,000
Research, development, test, and evaluation, Navy.....	5,844,357,000	---	---	5,844,357,000	6,232,300,000	+387,943,000
Research, development, test, and evaluation, Air Force	8,659,610,000	---	57,000,000	8,716,610,000	11,220,400,000	+2,503,790,000
Research, development, test, and evaluation, Defense agencies..	1,692,646,000	---	---	1,692,646,000	2,259,900,000	+567,254,000
Director of Test and Evaluation, Defense..............	53,000,000	---	---	53,000,000	60,000,000	+7,000,000
Total, title V, new budget (obligational) authority, Research, development, test, and evaluation....................................	19,859,148,000	---	57,000,000	19,916,148,000	24,256,600,000	+4,340,452,000
TITLE VI - SPECIAL FOREIGN CURRENCY PROGRAM						
Special foreign currency program.........................	3,083,000	---	---	3,083,000	3,800,000	+717,000
TITLE VII - GENERAL PROVISIONS						
(Additional transfer authority, sec. 733).............	(750,000,000)	---	---	(750,000,000)	(1,000,000,000)	(+250,000,000)
TITLE VIII - RELATED AGENCIES						
Intelligence Community Staff...........................	13,063,000	---	---	13,063,000	---	-13,063,000
CIA Retirement and Disability System Fund.............	84,600,000	---	---	84,600,000	91,300,000	+6,700,000
Total, title VIII, new budget (obligational) authority, Related agencies....................	97,663,000	---	---	97,663,000	91,300,000	-6,363,000

Comparative Statement of New Budget (Obligational) Authority (including Proposed Supplementals)

	FY 1982 Enacted	Proposed Supplementals Pay Increase	Proposed Supplementals Program	Combined Enacted Amounts & Recmnd Supplementals	FY 1983 Estimates	Estimates compared with Combined Enacted
RECAPITULATION						
Title I - Military personnel	38,098,093,000	---	366,700,000	38,464,793,000	44,895,500,000	+6,430,707,000
Title II - Retired military personnel	14,938,315,000	---	97,685,000	15,036,000,000	16,510,800,000	+1,474,800,000
Title III - Operation and maintenance	61,853,377,000	---	858,274,000	62,711,651,000	70,302,122,000	+7,590,471,000
Title IV - Procurement	64,841,585,000	---	1,042,691,000	65,884,276,000	89,547,214,000	+23,662,938,000
(Transfer from other accounts)	(208,000,000)	---	---	(208,000,000)	---	(-208,000,000)
Title V - Research, development, test, and evaluation	19,859,148,000	---	57,000,000	19,916,148,000	24,256,600,000	+4,340,452,000
Title VI - Special foreign currency program	3,083,000	---	---	3,083,000	3,800,000	+717,000
Title VII - General provisions (additional transfer authority, sec. 733)	(750,000,000)	---	---	(750,000,000)	(1,000,000,000)	(+250,000,000)
Title VIII - Related agencies	97,663,000	---	---	97,663,000	91,300,000	-6,363,000
Total, Department of Defense (NOA)	199,691,264,000	---	2,422,350,000	202,113,614,000	245,607,336,000	+43,493,722,000
(Transfer from other accounts)	(208,000,000)	---	---	(208,000,000)	---	(-208,000,000)
Total funding available	199,899,264,000	---	2,422,350,000	202,321,614,000	245,607,336,000	+43,285,722,000
(Transfer authority)	(750,000,000)	---	---	(750,000,000)	(1,000,000,000)	(+250,000,000)
Distribution by organizational component:						
Army	49,248,375,000	---	635,700,000	49,884,075,000	58,475,387,000	+8,591,312,000
Navy	65,984,739,000	---	708,474,000	66,693,213,000	86,012,755,000	+19,319,542,000
(Transfer from other accounts)	(117,500,000)	---	(37,226,000)	(154,726,000)	---	(-154,726,000)
Air Force	61,899,236,000	---	456,370,000	62,355,606,000	75,211,500,000	+12,855,894,000
(Transfer from other accounts)	(90,500,000)	---	---	(90,500,000)	---	(-90,500,000)
Defense agencies/OSD	7,472,936,000	---	180,400,000	7,653,336,000	9,305,594,000	+1,652,258,000
Retired military personnel	14,938,315,000	---	97,685,000	15,036,000,000	16,510,800,000	+1,474,800,000
Related agencies	97,663,000	---	---	97,663,000	91,300,000	-6,363,000
Total, Department of Defense (NOA)	199,691,264,000	---	2,422,350,000	202,113,614,000	245,607,336,000	+43,493,722,000
(Transfer from other accounts)	(208,000,000)	---	(37,226,000)	(245,226,000)	---	(-245,226,000)
Total funding available	199,899,264,000	---	2,459,576,000	202,358,840,000	245,607,336,000	+43,248,496,000
(Transfer authority)	(750,000,000)	---	---	(750,000,000)	(1,000,000,000)	(+250,000,000)

Comparative Statement of New Budget (Obligational) Authority (including Proposed Supplementals)

	FY 1982 Enacted	Proposed Supplementals Pay Increase	Proposed Supplementals Program	Combined Enacted Amounts & Recmnd Supplementals	FY 1983 Estimates	Estimates compared with Combined Enacted
Total mandatory and discretionary	199,691,264,000	---	2,422,350,000	202,113,614,000	245,607,336,000	+43,493,722,000
Mandatory	(15,022,915,000)	---	(97,685,000)	(15,120,600,000)	(16,602,100,000)	(+1,481,500,000)
Discretionary	(184,668,349,000)	---	(2,324,665,000)	(186,993,014,000)	(229,005,236,000)	(+42,012,222,000)

PERMANENT - TRUST FUNDS

	FY 1982 Enacted	Proposed Supplementals Pay Increase	Proposed Supplementals Program	Combined Enacted Amounts & Recmnd Supplementals	FY 1983 Estimates	Estimates compared with Combined Enacted
Trust funds, Army	---	---	---	186,993,014,000	31,000	+42,012,222,000
Trust funds, Navy	---	---	---	186,993,014,000	16,557,000	+42,012,222,000
General gift fund, Air Force	---	---	---	186,993,014,000	12,000	+42,012,222,000

SECRETARY OF DEFENSE

STATEMENT OF HON. CASPAR W. WEINBERGER

Senator STEVENS. With that summary, Mr. Secretary, I welcome you to the subcommittee. We have asked that you be prepared to proceed in any way you wish. Your full statement of course, will be printed in the record no matter how you wish to handle the statement here today.

Secretary WEINBERGER. Thank you very much, Mr. Chairman.

Senator STEVENS. Let me start out by saying, Mr. Secretary, that this subcommittee is delighted in the way you have presented this budget. We have some difficult problems this year and we look forward to having the same working relationship with you and your people as we had last year.

Secretary WEINBERGER. That was a very cordial remark and I certainly look forward to it, too, Mr. Chairman. We have always appreciated your courtesy in the committee room and elsewhere and your understanding of the major and difficult problems that are involved in the preparation of a budget of this kind. So we appreciate very much the opportunity to be here and to present these matters to you.

As you said, my statement is offered for the full record, and I certainly don't want to read it entirely. I would like to make, with your permission, just two or three highlights from that statement or points that I think underlie the preparation of the budget.

NEEDS OF DEFENSE BUDGET

The first is that the defense budget, we believe, has to be made up against the background of the needs. The needs can't really be measured on the basis of what is perceived to be fair to some other department or whether it is proper to have the defense budget expand when some other department contracts or anything other than the fiscal resources that are available and the need to which they have to be applied.

I have to tell you, sir, that the need has not diminished at all. The nature of the Soviet threat is still there. The nature of it is that it is growing, that it is not diminishing and that it has been growing on a steady predictable path for 21 years. In the past year alone they have built, completed and brought on line about 200 ICBM's, 2,000 tanks, 1,350 fighters and fighter-bomber airplanes, and 4,500 armored vehicles, that was just in 1 year alone. That is an increase in the pace, not a marked increase, and more than that, it is clear evidence that they are not slowing down.

INCREASE IN SOVIET MILITARY STRENGTH

All through the years since 1960 or 1961, the time of the so-called first Cuban missile crisis, the Soviets have added to their strength and they have added to it in a real way. They have steadily added to it so that their burden of defense on their economy is about 15 percent of their GNP. They have added to it in their weapons and related programs so that the dollar costs of their military investments exceed ours by something like 80 percent. They also have very low personnel costs. Roughly about 15 percent of their budget goes for personnel in comparison to about 50 percent of ours. A little less some years and a little more other years, but generally in that range. They have not paused or changed their pattern in this 21-year period.

We have gone through a period of détente, an era of good feelings so-called in which a great many people were led to the feeling that we could, as a result of that, reduce our defense expenditures. We have gone through periods of SALT negotiations and none of it has had the slightest effect on the Soviet arms buildup.

Their arms buildup is not defensive in character. These are weapons and weapon systems that are offensive and, as I pointed out many times before, the Soviet Union does not need an aircraft carrier to defend itself. That is just one small example.

They constantly revise their weapons and weapon systems. They are in the fifth generation of their intercontinental ballistic missiles. They are usually ahead of us in redesign and in bringing new equipment on line. The SS-20 which is in Europe now and is so-called intermediate range, though it is capable of hitting any target in Europe or any target in Asia, was being deployed at the rate of one every week. It is now being deployed at the rate of one every 5 days and they now have about 285 of them.

The count on that is 285 to zero because what we have are plans. We have counters to it on the drawing boards and in production. We do have authority from NATO to deploy them. But at the same time, we are in negotiations in Geneva with the President's very bold and very welcome proposal to eliminate all of those intermediate range nuclear weapons from Europe. I am convinced that the reason that we are in those negotiations is because we do have a plan to deploy weapons that the Soviets are very anxious not be deployed.

SOVIET WILLINGNESS TO USE OFFENSIVE CAPABILITY

We have this kind of a situation well around the world. We have not only the Soviet military buildup, but we have clear evidence of their willingness to use it. They have used it indirectly in Afghanistan, indirectly through intimidation and coercion in Poland and through client states in Ethiopia, Yemen, Angolia, Cuba, and Nicaragua. Those are all areas where we have interests that are adversely affected by the Soviet military buildup and by their willingness to use it.

We have not discovered any adequate counter to this other than to regain our own strength, to rearm America to the point where we will have sufficient strength to deter attack upon us. We believe that degree of sufficiency will be achieved when the Soviets correctly perceive that any first strike on us will bring a retaliation that will inflict a cost on them that they will find unacceptably high. As a result they will be deterred from making their attack.

That is the essence of what we are trying to do. The problem is that you can't do it in 1 year. It takes 5 or 6 years to do it, particularly when we have lost the momentum, as we have, as a result of our slow-down and either negative growth or level growth for a large number of years. The Soviets have not slowed down, as I have said, so they have the momentum. They are taking deliveries of weapons that they ordered in the 1970's and we are not.

It is essential that we not only start, which we have done last year with the assistance of this committee and the great support of this committee, but it is essential that we continue.

PROBLEMS IN REBUILDING

It is a long, hard path, it is an expensive path and it is a path that will require at least 5 to 6 years of steady applied effort, not only because it takes so long to get deliveries of things, but because we are starting from a situation in which we have to acquire a great many things. Some of them are designed after too long a time, and are now being produced and some of them are in the process of being designed. But one way or another they will not be available to us until toward the end of the decade. That is why it is essential that we start on this path and proceed on it.

At the same time, it is important to keep a sense of proportion. The defense budgets will not be more at any point during that 5-year period than 29 percent of the total budget. There are a lot of other things being done by the Government, contrary to what you might think if you just read some accounts of the size of the defense budget.

It is not a majority of the total budget by any means. It is not in any sense the largest departmental expenditure, but it is a very large expenditure. It is one that is required and it is one that reflects the President's feeling that the very highest priority that we can have at this time is to insure that we are able to keep peace with freedom.

The way we think that can be done, and the only way we think that can be done, is to acquire sufficient strength to deter attack upon us or our allies from a potential enemy that is fully prepared to launch attacks on more than one front at one time.

We do have, after a period of neglect, a great deal to do all at once. The budget before you represents the second 12-month increment of that program. Should we stop now or should we pause or look back and follow the path that we did through too long a time in the 1960's and 1970's, then not only will we delay our regaining the strength necessary in an era that is already dangerous for the United States and for her freedom, but we will find that we will need the things and they will be infinitely more expensive to get and we don't know if we will have the time to get them.

Those would be the principal points, Mr. Chairman, that I would want to have before you. General Jones may have a few points that he wants to make and then we would be delighted to try to take your questions.

PREPARED STATEMENT

Senator STEVENS. Thank you, Mr. Secretary. Your prepared statement will be inserted in the record at this point.

[The statement follows:]

PREPARED STATEMENT OF CASPAR W. WEINBERGER

SECRETARY OF DEFENSE

Mr. Chairman, Members of the Committee,

Fifteen months ago the American people gave Ronald Reagan the mandate to lead our nation. That mandate emphasized the immediate need to strengthen America. It is the President's responsibility, while working ceaselessly for peace, to ensure that the safety of the American people cannot successfully be threatened by anyone. President Reagan has kept his pledge to make this responsibility his first priority, and we are well launched on this gigantic task.

My primary statutory responsibility is to advise the President and the Congress of the things we must do to improve our national defense, and why we must do them. Serious deficiencies in our military forces have compelled us to develop new programs and to ask you for an increase in the defense budget. The major weaknesses in our defenses that have resulted from over a decade of neglect must be corrected. At the same time we must look at the decade to come. With your cooperation we will construct a defense that can substantially reduce the serious dangers our nation now faces.

In these opening remarks, I shall address three fundamental requirements of our defense effort:

- First, I want to tell you briefly about the changes in defense policy that I have instituted.
- Second, we have to address the level of defense spending that our security requires and how we apportion these resources among the many competing priorities.
- Third, I want to inform you about our efforts to obtain the very best value for every defense dollar spent -- through management improvements, savings, and by eliminating waste.

First, on our defense policy: Policy relates means to ends; it endows all our efforts with a coherence of purpose and a sense of direction.

Just as the level of resources that we devote to defense has become inadequate, so has our intellectual approach been overtaken by events. Indeed, our former defense policy has not only become obsolete because of new threats to our security, but it has also been discredited by its failure to recognize and cope with the deterioration in the global military situation. In fact, obsolete strategic concepts have stood in the way of necessary reforms. Hence, we have to break with past thinking and develop new policy and concepts.

But let me add a cautionary note here. Even though it is essential that we reform our defense policy, this reform cannot be a substitute for a vastly increased defense effort. The adoption of new ideas and thinking is sometimes presented as an alternative to sustained growth in the defense budget. It is not, part of the needed reform in strategic thinking is precisely the new realization that we must devote more resources to defense.

In stressing the importance of change, I do not wish to belittle the substantial continuities in our policy. The United States remains committed to a defensive use of military strength; our objective is to deter aggression or to respond to it should deterrence fail, not to initiate warfare. This stance has been fundamental to U.S. national strategy for a long time. But what is new in our defense policy is that we now realistically face the implications of this defensive stance. Since the United States will not strike first, our military forces must be prepared to react after the enemy has seized the first initiative, and to react so strongly that our counterattacks will inflict unacceptably high cost on the enemy, and thus deter their initial strike.

Three tasks, I decided, had to be undertaken at once with a high sense of urgency. First, we needed to make more realistic the manner in which our forces respond to warning. Second, we had to increase substantially programs to improve the steady state of readiness of our forces. Third, we had to enhance our preparations for military mobilization (the arrangements to mobilize, assemble, and deploy our forces) -- and we need to repair the national capacity to expand defense production rapidly during a crisis.

Our forces will, of course, be better able to cope with an armed attack if we alert them in response to warning and bring them to a higher state of readiness. Indeed, major aspects of our planning -- such as the NATO reinforcement plan -- are based precisely on the assumption that we can exploit warning of an enemy attack. To carry out a timely response to warning, however, two conditions must be met: we must not only receive warning, but also take the decision to respond. The first task has long been recognized; it calls for strong intelligence capabilities. We have taken steps to improve these capabilities. It is the second task that has been neglected. We cannot assume that the enemy will necessarily do us the favor of furnishing warning that is unambiguous. Military history reminds us that we ought to expect a massive and skillful effort at deception. It is sobering to recall how often extensive intelligence warnings failed to trigger the decision actually to prepare against attack.

Our forces must be prepared to respond to warning indicators that are highly ambiguous. Military planning for such a response is a measure we can take quickly and -- an added attraction -- at a very small budgetary cost. I have initiated a special effort in NATO to advance the planning for ambiguous warning.

Yet, while the planning is essentially cost free, the necessary backup is not. The most timely and energetic response to warning will not help us much unless our military forces are continuously maintained at a high state of readiness. The prolonged stringency in our Defense Budget has led to an underfunding of the very things that determine the readiness of our Armed Forces -- adequate manning and training, maintenance, supplies of spare parts, fuel and ammunition. The efforts for improved readiness and sustainability, thus, are necessary to enable us to respond to an attack, or to respond to an ambiguous threat of attack. I am stressing this point so much, Mr. Chairman, to convey to this Committee the fact that improved readiness and sustainability are vital.

As Secretary of Defense, I cannot confine my attention to the long-term recovery of our military strength -- important as the sustained effort to build up our forces is, and as long as it takes to reacquire the relative strength we once had. I am responsible to the President and to the nation for our security here and now, for a crisis that might come tomorrow. Improvements in readiness -- apart from being essential for a strategy that is defensive -- have both the advantage and the imperative that they be realized soon. This need for quick improvement also inspired some of our decisions on the acquisition and reactivation of weapon systems. For example, the reactivated IOWA-class battleships, equipped with modern cruise missiles and electronics, and the deployment of cruise missiles on attack submarines, are quick ways to get more naval power to sea, at far less cost than building new ships of comparable power.

Preparations for large-scale military mobilization must complement our improved readiness and our preparations to respond to warning. Our existing military assets -- personnel, arms, and supplies -- may have to be assembled and deployed rapidly to the arena of conflict. What is needed here are exercises and up-to-date planning -- low-cost measures that can go a long way to strengthen the deterrent effect of our forces.

Distinct from these preparations for military mobilization are the efforts I initiated to repair our capacity rapidly to expand defense production. Our historic experience suggests that a crisis threatening our national security is likely to lead to a decision massively to expand our defense effort. For example, upon the outbreak of the Korean War, Congress decided on a threefold increase in our defense budget. But we would be complacent to assume that we could readily call on American industry today to accomplish comparable feats in expanding defense production.

The improvements in the acquisition process that we instituted last year, in particular the multi-yer procurement, will help strengthen our defense industry. We must induce deense contractors and subcontractors to invest in production facilities, otherwise we will not benefit from the deterrent effect of our industrial potential. Hence, we should not look at defense contracting in one-year slices. To get the best value, both in terms of program cost and surge capability, we need steady acquisition programs.

Another change in defense policy is the increased recognition that our conventional forces must be designed for a wider range of contingencies. It is my aim to direct the improvement of our forces so as to create a better balance in meeting the different threats. For many years, it has been U.S. policy to let the investment and planning for our conventional forces be determined primarily by the requirement for fighting a war centered in Europe.

Without in any way weakening our resolve to retain our strength for that purpose, we must recognize that in recent years the Soviet Union has been greatly increasing its ability to exploit political instability, and to project military power into other vital areas, such as the Persian Gulf and the Caribbean.

For the region of the Persian Gulf, in particular, our strategy is based on the concept that the prospect of combat with U.S. forces, plus those of other countries with a far greater economic stake than we in preserving access to the oilfields, coupled with the prospect that we might carry the war to other arenas, is the most effective deterrent to Soviet aggression. This strategy, thus, has two dimensions. First, we must have a capability rapidly to deploy enough force to hold key positions, and we must be able to interdict and blunt a Soviet attack. Hence, we will propose to you improvements in the Rapid Deployment Force and in related mobility. Second, this strategy recognizes that we should have options for fighting on other fronts. Our growing maritime capabilities will serve these options.

Third, we must recognize that without the complementary development of allied and friendly forces and facilities, we could deal with the new Soviet threats, if at all, only at much greater cost. Our security assistance to many of these countries is much smaller today than in the past; yet it is more important because U.S. interests are threatened now in more places. The President, accordingly, has sought to strengthen our security assistance to allied and friendly nations. Such assistance will enhance both the complementary roles of U.S. and friendly forces, and the availability of overseas facilities. Some of the essential forces and facilities are owned by our allies and friends who cannot fund the desired force improvements on their own. I know Secretary Haig and I can count on the support of members of this committee for our security assistance programs.

A fallacy in recent defense policy regarding conventional warfare has been the "short war" assumption -- the notion that in planning our strategy and designing our forces we could rely on the assumption that a conventional war would be of short duration. Common sense and past experience tell us otherwise. I have therefore instituted changes to correct this fallacy. It goes without saying that, should deterrence fail and a conventional conflict be forced upon us, we would bend every effort to win the war as quickly as possible. However, unless we are so strong, or our enemy so weak that we could quickly achieve victory, we cannot count on a war ending within a few weeks or months. And deterrence would be weakened if the enemy were misled to believe that he could easily outlast us in a conventional war.

The efforts that I have initiated to overcome the "short war" fallacy -- improved sustainability for U.S. forces, and a strengthened capability to expand defense production -- are essential to reduce the likelihood of war. The effort to achieve greater sustainability is a key part of the Defense Budget that I am submitting to you.

It is by intention that I have not mentioned nuclear strategy until now. This Administration does not regard nuclear strength as a substitute for conventional strength. And while we do not seek nuclear "superiority" for the United States, by the same token, we will make every necessary effort to prevent the Soviet Union from acquiring a superiority that would mistakenly and tragically lead them to believe a first strike by them could ever succeed.

At present we spend some 85 percent of our total Defense Budget on non-nuclear forces, and that accurately reflects our priorities. Non-nuclear capabilities would, in fact, receive an even higher priority in our budget, had it not been for the fact that this Administration must cope with the severe inadequacies it inherited in the realm of strategic and theater nuclear weapons. As you know, we are faced by the necessity of modernizing and strengthening all three parts of the triad at once, and we have begun that awesome task.

I had briefed you last fall on President Reagan's program for the modernization of the strategic forces. I can report today that not only is it proceeding as planned, we are actually exploring possibilities for accelerating the delivery time of some of the most important strategic weapons systems.

As I stressed last fall, President Reagan's strategic force program takes a long-term view. This is essential since strategic arms take a long time to acquire and are part of our forces for many years.

Let me digress, at this point, on the question of MX basing. There continues to be unfounded press speculation regarding "abandonment" of parts of the MX program, specifically on the issues of TITAN versus MINUTEMAN silos for interim deployment and whether we in DoD have changed our minds about hardening silos. These stories are even more incorrect than most that have been floating in recent days about the Defense Department. Specifically, repeated previous DoD testimony before Congress indicated that the initial MX missiles would be deployed in "existing silos," either MINUTEMAN or TITAN or some combination of the two. After a careful study involving many factors, my decision in favor of deploying MX in MINUTEMAN silos was based on five primary reasons: (1) their spacing is more compatible with BMD deployment; (2) they provide more flexibility for future expansion of the system, (3) they maximize operational effectiveness for MX; (4) they permit deployment in one wing, which minimizes C^3 problems and reduces cost, and (5) soil conditions dictate use of the MINUTEMAN silos.

The DoD appropriations act for FY 1982 forbade us to do super-hardening except as part of a permanent basing mode. Thus, we in the Defense Department have not changed our minds, nor have we abandoned the concept. To be charged with "changing our minds" when the Congress forbade us to proceed with our proposal for hardening existing silos for the MX is reasonably close to the height of inaccuracy.

But we also must take a longer-term view of our overall military competition with the Soviet Union. President Reagan's initiatives on technology transfer, on East-West trade, on terrorism and Soviet penetration into Africa and Latin America are all part of this larger strategy. So are the President's initiatives on arms control. We don't expect quick results. But if we have the support of Congress for a coherent and sustained effort to strengthen our defense and to improve other instruments of our foreign policy, the long-term prospects -- I feel confident -- are bright.

Let me now turn to specific budgetary questions.

The overall level of the Defense Budget must take account of the Soviet threat. We recognize full well that there are other threats. But only the Soviet Union has the power to inflect tens of millions of casualties on our population. Only the Soviet Union has massive and modern conventional and nuclear forces deployed, directly confronting our friends and allies in Europe and Asia. Only the Soviet Union has the forces and geographic proximity to threaten the free world's source of oil. And the Soviet Union is embarked on a sustained effort to encourage and arm totalitarian forces in various parts of the world, so as to expand its political influence and military reach. And, as we know, the Soviet Union is perfectly willing to use its strength directly, as in Afghanistan, or to intimidate or coerce from outside, as is the case in Poland.

Mr. Chairman, measured by the threat we confront, our proposed Defense Budget is fully justified and by no means extravagent. The grim fact is that even with the projected real growth, Soviet military investment is likely to exceed ours for many years. If we again cut back our Defense Budget, after only one year in the effort to regain our strength, this gap would widen, resulting in an intolerable deterioration in our security. If, on the other hand, Congress approves our proposed Defense Budget, I believe, Mr. Chairman, the danger to our security can be brought under control.

I know that you are deeply concerned about the budget deficit. I know that you feel under immense pressure to reduce outlays. And I know that many consider the Defense Budget the place here such outlay reductions can be obtained. Defense outlays can be cut in several different ways: pay and benefit increases can be reduced; funding for operations and maintenance can be reduced; investment can be curtailed; or our force structure sharply reduced. The first approach would seriously harm the morale of the military, and would conflict with Congressional directives with respect to manpower that led to the first significant improvements in pay and benefits since the inception of the all-volunteer force. Reductions in operations and maintenance funding likewise would contradict consistent, and correct, Congressional directives to improve the readiness of our armed forces. Such cuts would result in curtailment of flying and steaming hours, training, and other key activities that are critical to military readiness.

Finally, reductions in investment outlays could only be achieved through mammoth reductions in obligational authority. Because the relationship of TOA to outlays is roughly four-to-one for any given year (and as much as forty-to-one in the case of the first year of a new shipbuilding program), only vast reductions in investment -- of a magnitude to cripple the orderly modernization of our forces -- could produce reductions in the levels of outlays some Congressional voices have called for. For example, cutting B-1, MX, cruise missiles, two carriers and the TRIDENT missile, for a total of $19.5 billion in TOA would result in $5 billion saving in outlays in fiscal year 1983. This would not affect the overall deficit materially, but it would signal the world the U.S. was still following the same old uncertain, unreliable policy of the past and courting grave danger as we face ever increasing Soviet strength. We are therefore faced with a Hobson's choice, and the answer is to choose none of the aforementioned alternatives, but instead to recognize that our defense expenditures are geared to meeting a threat that is not related to our economic problems, except insofar as it seeks to exploit them.

We are requesting $258 billion in total obligational authority for FY 1983, which we estimate will result in outlays of $215.9 billion, given the achievement of all the savings we will secure. Our decision to fund fully the weapons systems we are proposing, especially two additional aircraft carriers, and our decision to fund fully our multi-year procurements, account for the larger TOA and for 20 percent of the increase over the FY 1982 budget. Thus, if the Congress approves the FY 1983 request, we anticipate a lower rate of growth of total obligational authority for FY 1984.

In designing the FY 1983 budget, we gave first priority, for the policy reasons I mentioned, to improving the readiness of our forces. For example, flying hours for Air Force pilots, which had dipped as low as 13 hours per month in FY 1978, will again be increased, rising from 17 hours per month in FY 1982 to about 18 and a half hours per month in FY 1983.

Our next priority is to improve sustainability of our forces. At the moment, some of our forward deployed units have only a week's supply of key munitions. Thanks to the increases provided in the 1981 and 1982 budget, this situation will soon begin to improve. But our effort must be continued in the 1983 budget and beyond, if we are to achieve the minimally necessary levels of war reserve equipment, spare parts, and munitions. If approved by the Congress, the Reagan Administration's five-year plan for FY 1983-87 will fund munition inventories to support U.S. ground forces in sustained combat in Europe and Korea for 60 days, and the RDF in a Persian Gulf contingency also for 60 days.

Apart from the crucial program for the modernization of the strategic nuclear forces, the most significant force expansion I am proposing centers on the Navy, particularly those components that have offensive missions. By the end of FY 1982 our deployable battle force will total 514 ships of which 475 are general purpose force ships. By the end of this decade, when most of the ships in our five-year ship-building plan will have joined the fleet, the deployable battle force will exceed 600 ships. For FY 1983, our requests include 18 new ships, six conversions, and one acquisition. The five-year plan totals include 133 new construction ships, ten conversions, and six acquisitions.

Our objective for mobility programs over the next five years is to develop the capability to deploy the Rapid Deployment Joint Task Force to Southwest Asia in four to six weeks and to continue our plans to reinforce NATO with 10 Army divisions and 60 Air Force tactical fighter squadron in 10 days. Our program to do this contains additions to each component of mobility forces: airlift, prepositioning, and sealift.

After careful consideration of the alternatives for meeting our airlift needs, we have decided to procure 50 new C-5 aircraft to be supplied by Lockheed under a fixed price contract, and to contract for 44 additional McDonnell-Douglas KC-10 tanker/cargo aircraft. We chose this alternative because we needed to increase capability as rapidly as possible. Both C-5s and KC-10s are available, at quite favorable comparative prices, sooner than the C-17, and with minimum risk in cost, schedule, or performance. The new C-5 is the result of the lessons learned from the first C-5. The KC-10s could be used as tanker or cargo aircraft. We also plan to restructure the Civil Reserve Air Fleet (CRAF) Enhancement Program.

To complement this airlift in meeting early deployment objectives, we propose to continue plans to preposition six division sets of POMCUS in Europe, to store equipment and supplies for three brigade-sized Marine task forces aboard chartered ships in the Indian Ocean and for one such force in Norway, and to position selected items of Air Force equipment at bases in Europe and Southwest Asia. We will also continue programs to store war reserve materiel for all Services in both of these theaters and in the Western Pacific.

To meet subsequent objectives that cannot be met soon enough by ships from the commercial fleet, we plan to strengthen DoD's surge sealift capability. We are requesting funds to complete conversion of the remaining four SL-7s and to further expand the Ready Reserve Fleet. We are also significantly enhancing Army and Navy capabilities for offloading cargo over the shore or in austere ports.

We plan fairly large growth in both Air Force and Department of the Navy tactical air forces. Air Force fighter forces will grow from roughly 36 notional wings at the end of FY 1982, to 40 wings (26 active/14 reserve) at the end of FY 1985, and to 44 wings (29 active/15 reserve) by the end of the decade. At the same time we plan to increase our Navy active carrier air wings from 12 at the end of FY 1982 to 14 in FY 1987.

These force structure buildups will be supported by significant increases in tactical aircraft procurements over the FY 1983-87 period. At the end of the funded delivery period the Air Force's fighter/attack aircraft inventory will exceed 4,800 (compared to less than 4,200 planned by the previous Administration). At that time, the Department of the Navy fighter/attack inventory will exceed 1,900 aircraft.

Our emphasis on developing more flexible and mobile forces does not mean that we are neglecting our ground forces. We will maintain overall U.S. ground force structure at a total of 28 divisions: 16 active and eight reserve Army divisions and three active and one reserve Marine Corps divisions. And we plan major progress in modernization. We will procure 776 new M-1 tanks in FY 1983, increasing the production rate from 30 to 60 tanks per month by late 1982 and eventually to 90 tanks per month by 1985. We also plan to buy 525 Bradley Fighting Vehicle systems for the Army and 267 Light Armor Vehicles for both Army and Marine Corps, providing a major enhancement in the tactical mobility of our mechanized infantry forces.

Mr. Chairman, I am keenly aware of the compelling need to manage our resources with the maximum efficiency. I have instituted a program which receives first priority and precedence, to cut out all waste, to find savings, to eliminate mismanagement. Deputy Secretary Carlucci will testify next week in greater detail on this vital program.

Our current funding policies result in specific five-year savings and economies in Budget Authority of $41.4 billion when compared with the funding which has been required to follow the previous Administration's policies. If FY 1987 is included, the figure grows to $51.5 billion and we will be looking for even larger savings in the years to come. FY 1983 Defense outlays have already been reduced by more than $5 billion based on new economies and efficiencies.

The constraints in effecting further savings must be properly understood. About 93 cents of each Defense outlay dollar are committed at the start of the year to cover prior year programs and minimal operations of the Department. This leaves only seven cents of each Defense outlay dollar for spending for new programs. Moreover, short run outlay cuts in the Defense Budget can imperil long-term goals. Because of Defense spend-out patterns, outlay reductions require program reductions almost four times as large. This causes serious program disruption and impacts heavily on faster spending readiness functions.

The task before us is too big and must be done too quickly for any one country. This fact sets before us one of our greatest tasks and challenges: we must concert our plans and policies more completely with our allies, so that we will have a common defense strong enough to ensure our freedoms at a cost tolerable to all. We must neither do less than our fair share because some of our allies may seem to do so. Nor should we abandon our efforts to convince them that we must all do our fair share, nor should we ever abandon them.

Mr. Chairman, for the national strength of free societies to prevail in the long run, our defense strategy must do two things. First, it must bring to a halt the further expansion and consolidation of the Soviet military empire, whether this expansion would proceed through direct Soviet military intervention (as in Afghanistan) or through less direct intervention (as in Angola, Nicaragua, and elsewhere). Second, our strategy must see to it that the productivity and technological creativity of free societies are not exploited or handed over to the Soviets to make good the chronic deficiencies of the Communist system, in the name and under the false banner of Trade.

In the nuclear age, more than in any other period in human history, military strategy must be the servant of national policy, a policy that is the ultimate trustee of the nation's interests. But to paraphrase Clausewitz, policy cannot make demands on military strategy which strategy cannot fulfill. I have the responsibility as Secretary of Defense to tell you that, in my view, no defense policy, no strategy, could succeed in the long run unless we pay close attention to the foundations for military strength. We must pursue a policy that ensures that our resources will not be diverted to strengthen our adversary, but instead will fully serve the cause of freedom.

Let me conclude, Mr. Chairman, by expressing my deep appreciation to you and to this Committee for the unstinting support given to the Defense Department during the past year.

JOINT CHIEFS OF STAFF

STATEMENT OF GEN. DAVID C. JONES, CHAIRMAN

Senator **STEVENS**. General, do you have additional comments?

General **JONES**. Yes, Mr. Chairman. This is my eighth and last year of appearing before committees of Congress to testify on the budget and there is a great deal that we have to do.

NEED FOR PROPER ORGANIZATION

This, in my judgment, is the most dangerous and turbulent decade facing our country since the 1940's and we need additional defense resources. But we need far more than that, we need a proper organization.

I normally provide an overview, but this year I felt my best service would be to concentrate on organization. I have made some proposals. I don't believe we have the right organization today. It is a patchwork development out of World War II with remarkable resistance to change.

We normally don't make changes until after a catastrophe. The war of 1898 was a debacle from a military standpoint and we reorganized; after Pearl Harbor there was reorganization, and I think a lot needs to be done now.

Committees can serve a useful purpose, as you understand, but they are notoriously poor at running things. We have a committee system that is all-encompassing, not only on advice but on running things under the direction of the Secretary of Defense. In particular, we have a committee system which from the very start had great pressures on it for unanimity. Even the law says that if we five can't agree unanimously then we must report the split to the Secretary of Defense.

Also, four of the five members of the committee have institutional responsibilities as head of their service, and it is difficult for them to take a broad look that doesn't take the service desires into great consideration—which tend to dominate what is going on.

RECOMMENDATIONS ON LEGISLATIVE ACTION

So I have made some recommendations. We are working on them now in the Joint Chiefs of Staff. I will then go to the Secretary of Defense with specific recommendations to include some legislative actions. But I consider this to be a very important thing that needs to be done in this country that can have a long-term beneficial impact on our national defense posture. Thank you.

Senator **STEVENS**. Thank you. General, I will have some questions about that later. Our good friend, the Senator from Mississippi is here. Do you have any opening statement, John?

Senator **STENNIS**. Well, I believe not. I think time is so precious here. I will have something to say later but you can skip me now for an opening statement.

Senator **STEVENS**. Senator Rudman?

Senator **RUDMAN**. No opening statements.

Senator **STEVENS**. Well, we are going to proceed, gentlemen, on the same basis of having questions limited to 5 or 7 minutes, and we won't be rigid about it, by members so that we can all participate in the dialog with the Secretary.

FUNDING FOR PRIOR-YEAR PROGRAMS

Mr. Secretary, as I understand it, 93 percent of this budget is for outlays for operation and maintenance, or pay and for spending for prior year authorizations and projects that have been started in prior years. There is only 7 percent new money requested; is that right?

Secretary **WEINBERGER**. Yes, sir. That is correct.

Senator **STEVENS**. Can you tell us a little bit more about the 93 percent? We have so many suggestions that we cut this budget. What really is comprised in that 93 percent and how much of it is really subject to any kind of cut without reducing our readiness or our program for modernization?

Secretary **WEINBERGER**. Very little of it, Mr. Chairman. Essentially what we have, as you know, with the authorization and the appropriation process, is that any 1-year budget reflects decisions made 4, 5, 6, or 7 years ago to a very considerable extent.

CURRENT OPERATIONS OF DEFENSE DEPARTMENT

In the 93 percent there are the current operations of the Department, which is to say salaries, retirement payments, and all of the personnel costs. These run close to 50 percent of the total budget.

AMOUNTS FOR PRIOR CONTRACTS

Then we have the amounts that we are paying out under prior contracts such as, the amount for the procurement now after 20 years of development of the M-1 tank and the amounts that are now coming in for procurement of the infantry fighting vehicle which was 17 years in development. These are sizable amounts.

We have smaller amounts in for the beginning of ship construction. For example, we have something well under $200 million that would be the first year's increment, if the Congress approves, of two new carriers. We have asked for the authorization, which is over $6 billion, for the two carriers. We want to start them together and complete them together. By doing that we can save $750 million in construction costs for the two carriers that we ultimately will need. The $750 million is what we save by doing them both at once as opposed to doing one now and then another one in 3 or 4 years.

READINESS ITEMS

Your other large items besides personnel in the 93 percent that you spoke of are operations, maintenance, fuel, ammunition for training, things that increase readiness, things that will bring the ammunition supply up to where we would have 23 days or 24 days of fighting capability, should we need it in various parts of the world and things that will bring flight time up from 14 to 17 hours a month. Things of that kind are very mundane but they are very important and have been delayed over the years. They haven't been done because in many senses they are the easiest to cut. They don't have a large constituency.

They are, however, very serious undesirable things to reduce because they reduce the training time, the readiness, the sustainability of the forces that we now have in the event they should be needed.

In order to get very large cuts in outlays, you really have only two places you can go, and one is personnel and the other are these readiness factors. Personnel costs outlay at about 95 percent in the first year. Readiness and sustainability outlay somewhere in the 1980's I would think in the first year. Everything else outlays very slowly. Sometimes they only outlay 5 to 15 percent in the first year.

FUNDING REDUCTIONS

In order to get very large savings we have to bear in mind one thing, and that is that very large savings have already been obtained. We were working on this budget all year, as is normal. In September we took $5 billion out of it. As a result of the President's direction, in which we fully concurred, we took $2 billion out of 1982 and $5 billion out of our plans for 1983. We did that.

We also have driven in higher savings, a little over $6 billion, because we believe the programs that we seek and that we believe we need will cost about $6 billion more than the $215 that we have for outlays in our estimates. That means that we have to achieve management savings of $6 billion in the course of operations during this year. We think we can do it. We have a number of new management initiatives that Secretary Carlucci and others have identified and discussed. They include multiyear procurement and better budgeting practices, and a very keen look at comparatively small savings.

USE OF TRAVEL AGENTS

One of the ones that I have mentioned several times before is the fact that we are taking advantage of all kinds of travel bargains by using travel agents and getting weekend tickets and things of that kind. That saved us, because of the amount of travel that is involved in this department, about $60 million in a year. We are looking at everything we can to get that kind of savings.

If you want much bigger savings in outlays in 1983, then really the only way to do it is sharpen reductions in the number of divisions, the number of tactical air wings, and the number of ships under construction, and in active service.

REDUCTION IN TRAINING, OPERATIONS, AND AMMUNITION SUPPLIES

The next way is to cut down training, cut down operations and cut down ammunition supplies. These are all things that unwind or wind down the basic readiness and the immediate strength of the Nation.

END-OF-YEAR ACTIVE DUTY STRENGTH

Senator **STEVENS**. My staff tells me the active duty end-of-the-year or average strength to be 2,148,000 people.

Secretary **WEINBERGER**. Yes, sir.

Senator **STEVENS**. How does that compare with the past?

Secretary **WEINBERGER**. That is an increase based on the increased amount of weaponry and the increased amount of strength that we feel we need. It is additional tactical air wings and additional ships that are coming on line. It is not an increase in the Army strength.

Senator **STEVENS**. How does it compare with 10 years ago or 20 years ago? What is the trend on this?

Secretary **WEINBERGER**. We have got the figures for 1981 in which the military end-strength was 2.1 million. The military end-strength in 1983 would be 2,189,000. From 1981 that is up about 88,000 and from 1982 it is up about 56,000.

Senator **STEVENS**. General.

General Jones. The Chairman asked for a comparison with 10 or 20 years ago. We had about 3 million people. We have come down from 3 million to a little over 2 million and now we have bottomed out with a very slight increase in the 1983 budget from 1982 and 1981.

Senator **STEVENS**. That is what I am trying to get to. If we limit your increase of your end-strength, there is really not much difference in the outlays for 1983, and that is really the goal of people that want to cut the budget.

General Jones. It is not a major increase. Usually when you limit military personnel you reduce the input, the recruiting, and achieve only those savings for privates, E-1's.

MILITARY STRENGTHS

Secretary **WEINBERGER**. On military strength, Mr. Chairman, I have just been shown the figures by Mr. Borsting. In 1964, 2,600,000; in 1968, 3,500,000; and in 1974, 2,100,000. We have stayed right in that range, 2,100,000, 2,061,000, 2,110,000 right straight through. That is the general pattern and of course the Vietnam war was involved in that.

NEW PROGRAMS

Senator **STEVENS**. What is the 7 percent then, Mr. Secretary? Ninety-three percent is basically uncontrollable if we maintain the same level.

Secretary **WEINBERGER**. Those are the new programs. Ship construction is a big piece of it. It is the beginning work on such things as the new carriers. It is the beginning work on some research and development leading toward the next generation of weapons and next generation of missiles, things of that kind. That isn't to say that the whole 93 percent is not controllable, but it is to say that the 93 percent reflects the normal operations of the Department and the continued payments on programs previously authorized and approved by the Congress. The 7 percent is in effect the new starts.

TOTAL SAVED BY CUTTING PROCUREMENT ITEMS

Senator **STEVENS**. I have had people ask me how much is this committee going to cut from this budget. Some say $20 or $25 billion. If we cut out all of your new procurement, your major systems, have you figured out how much we would save?

Secretary **WEINBERGER**. Yes. You could save a little less than $5 billion in outlays if you stop the M-1, tank, the B-1B plane, the M-X missile, the two new carriers, and the Trident submarine. If you cut all of those out this year you would save, in outlays, a little less than $5 billion. In authority you would probably be saving somewhere up around $32 billion and that of course is not money out of the Treasury. That is authorizations to do the programs. That would in effect cripple our strategic recovery program. It would delay things that we believe ultimately will have to be done and it would make them infinitely more costly.

Senator **STEVENS**. That is the last comment that I want to try to identify for the record and then I will yield to my colleagues here for a while.

DELAY COSTS ON MAJOR PROCUREMENT ITEMS

If we delay these things, as some people say, you know, stretch them out, have you got any factor of your figure of how much on the average these big ticket procurement items cost us for every year of delay?

Secretary **WEINBERGER**. There are two factors that go into it. One is the inflation rate, whatever that turns out to be, and it is usually higher with defense procurement than with the civilian economy because scarce minerals and materials are required and very highly skilled labor is required. Both of these have differing inflation rates than the civilian economy. So you are always going to have an inflation factor if you delay something.

That is the other part of doing the two carriers together this year. You not only save the $750 million in construction costs by doing the two together, but you save at least another $200 million in the inflationary reflection of delaying it, because by doing the two at once you get them 22 months sooner than you would if you did them separately.

There is just no question that both the inflation rate, and the fact that if the production line shuts down because of stopping or slowing down a program then you have to restart, that adds enormously to the expense. I don't have a specific figure, but it is a combination of what the inflation rate and the other would do.

We believe that we can by increasing, and this is over a 7-year period of the total program, the obligational authority by $2.7 billion we save $2.2 billion in actual outlay costs. That is by starting early, by getting the authorization now, by giving the contractors the ability to order the parts necessary before inflation gets any worse, is the way you can make savings of that kind.

The frustrating thing, which I know the committee faces, is that it is very hard to make savings in the first year, and the first year is when we all would like to have them.

Senator **STEVENS**. Thank you very much.

Senator Stennis.

Senator **Stennis**. Well, Mr. Chairman, frankly I haven't had a chance to finish my special preparation. I came on a matter of respect here for the Secretary, General Jones and you and the subcommittee and also to try to learn.

EXCESSIVE MANPOWER IN UNIFORM

Gentlemen, on the manpower, frankly, I have always thought that you had too many people in uniform. Too much of the dollar is going for this purpose. You hardly portray the picture correctly in comparing that $3 million of 10 years ago and $2 million today. Of course, 10 years ago we had the war in Vietnam, the manpower required was at the highest levels and a decrease now is because of the after-war years. A lot of things come to mind.

I appreciate the fine work that has been done on this budget. It is an extraordinary time to meet unknown contingencies on the borders to the south of us, and in Western Europe we have great uncertainties.

RANK AND FILE REACTION TO DEFENSE BUDGET

You know there have been some complaints in the past. This is the first time since I have been a member of the Armed Services Committee where there was real reaction among the people about the size of this budget. Don't overlook that. A large number of people among the so-called rank and file have noticed these enormous increases. I can explain some of them and some I can't, frankly.

I remember when just the average submarine, just the ordinary type submarine, cost $30 million. Now the largest is around $1 billion, isn't it, the Trident?

Secretary **Weinberger**. The big one, yes, sir.

Senator **Stennis**. So that gives an illustration and you can't compare these figures. You can't compare them. It is just a different world we are living in.

If I had any observation to make, one of them would be that it looks to me like, Mr. Secretary, that we just have too many missiles, too many and too many different kinds. I am not technically prepared to speak on that, but it costs so much and by the time they get to production, it just adds up to where one can hardly carry the load. We should take a special look at the cost.

Now just a short time ago we had very respectable testimony, Mr. Secretary, about the capacity that you have to use all this money. I am talking about the machinery or weaponry. I know we went into that quite a bit with some outstanding men in uniform who had the capacity to know what they were talking about. Have you had a chance personally to look into this situation?

Secretary **Weinberger**. To some extent, yes, sir. We have been meeting with a number of people from industry to inquire as to the ability of the defense sector of the private economy to deal with this.

We have one recurrent theme that runs through a lot of these meetings, and that is that the United States has been a rather bad customer over the years, a rather unreliable customer. Cancellations quickly follow orders. There hasn't been, until recently, any kind of compensation available for companies that geared up and put in new tooling and so on to do this military construction and then had it canceled.

MULTIYEAR PROCUREMENT

We believe that with the multiyear procurement, which in effect presents the industry with an authorization and with an agreed upon program to acquire something over a number of years, and we have done I think something like 15 or 16 of those this time, that they will then have considerably more confidence and they will move into this kind of activity.

We believe, in short, that we will have the industrial capacity to produce the things that we are seeking in this year and that there will be an expansion in that sector of the economy next year. We think it is essential to do that.

Obviously, if we cannot place these orders, if we find the industrial community is not large enough to do the procurement, the money wouldn't be spent. But it is essential that we do expand that portion of the economy that is devoted to defense production because it has been our great secret weapon in the past. It has been the thing that enabled us to overcome immense disadvantages of numbers, both of personnel as well as equipment, and it is our technological edge that has always given us this enormous advantage.

So we think it is important not to neglect that and to develop it. We believe that as these budgets are approved and as Congress makes its decisions on this in future years that industry will respond to what will clearly be an opportunity for it to construct these things, an opportunity that will have more certainty to it than in the past.

AIRCRAFT CARRIERS

Senator **Stennis**. Well, I am glad you have been into it. You have been a very busy man.

Now you have an item here of two carriers. I was really shocked at that because I know we just have one production yard now that can build that type carrier. Is that right?

Secretary **Weinberger**. Yes, sir, but that yard is the one that has worked with us in developing the plans and gave us the encouragement really and the knowledge that we could procure the two carriers together and get them 22 months sooner than it would otherwise have taken. This results in $750 million in savings just in the construction alone, to say nothing of the additional amounts that would be saved by getting them 22 months early.

It is clearly going to be necessary to have two additional carriers. As you know, two of the ones that we have on line now are nearing the end of their predicted life. They will be extended to the greatest extent we can, but this is a very vital part of the Nation's defenses, the carrier battle group.

It is, as far as I can tell, generally agreed that ultimately we will need these two. If we can get them for that much of a savings, then we feel that we should. So we have put in a large amount of budget authority for those two, over $6.3 billion. The outlays will be, I think, a little over $100 million this year, but we will be started on a path that will bring us a very real savings.

It is a rather startling concept and I shared exactly your feeling until we went into it in considerable detail.

Senator **Stennis**. Well, I wanted you to give us your opinion of the carriers. I am pro-carrier. I was the author of the amendment that added a carrier 2 or 3 years ago and the bill was vetoed because of the added carrier. The President vetoed the bill on that grounds and we didn't have enough votes to override. So I have no complaints about getting the carriers. That is one of the assets of our worldwide strength.

This yard now, do they agree with the possibility of your saving $750 million by funding for two carriers in a single year?

Secretary **Weinberger**. Yes, sir. We would be glad to supply the detailed figures, but that is exactly what they say.

Senator **Stennis**. Well, I don't doubt your word as to the calculations at all.

Secretary **Weinberger**. It is a surprising concept, but it is, I am convinced, accurate, and of course the contracts that we would sign would hold them to that. We are, incidentally, going to be very much more careful about contracts in the future. I have to say that we found some quite bad contracts from the past and it is one of the problems we had, particularly with the Trident submarines.

Senator **Stennis**. Well, I know, and that is pretty much the history of the developments here, year after year after year, with this condition.

Secretary **Weinberger**. We believe this can be done. There are new methods of construction and by doing the two together and working in parallel and ordering the parts ahead of time and saving costs by ordering them early you not only can get the savings but you do get the carriers 22 months sooner. In this kind of world that is a major factor, even without the savings. When you add the $750 million in construction costs and the 22 months of noninflation, so to speak, you really are saving very close to a billion dollars or a little over a billion while getting something that ultimately we believe we will need.

As sort of an illustration, the TOA, the obligational authority, looks like a hugh increase this time, but by doing that we do believe that over the years we will make real outlay savings.

Senator **Stennis**. Well, I don't want to prolong this at all, but we have so many instances where there was a lot of disappointment on how these things came out. I know when I first became chairman of the Armed Services Committee I was going to do something about the tanks, the delinquency in getting a new tank. I jumped into it with both feet and, you know, at that time we had been working on the development for something like 10 years. To make a long story short, we abandoned it because it got so expensive and started on a new one. As chairman of the committee I was going to get something done about it. Well, you just said it is 17 years since you started on the tank that we are now producing. Our records will show that year after year various improvements were just around the corner but they hadn't developed and the money continued going up by leaps and bounds. I am not blaming you of course. You weren't there.

COSTS OF REDESIGN

Secretary **Weinberger**. We are to blame for a lot of things but not that. The simple fact of the matter and you have put your finger right on it, is constant redesign that is one of the big factors.

There are two factors I think, or maybe three, but one is constant redesign. The second is the failure to monitor the performance closely enough. The third is a bad contract to start with. We are trying to do something about all of these things at once. We do have now a very close monitoring capability.

B-1B AIRCRAFT

For example, every 2 weeks I get a briefing on what has happened the previous 2 weeks with the B-1B and the same with the advanced technology bomber. We have frozen the design so that even if the finest gadget in the world appears tomorrow we are not going to redesign the plane to incorporate it. You have to make that choice, because, as I am sure I have mentioned to you, when I was running the budget in 1971 we put the money into the B-1 and it was supposed to be ready in initial operating capability in 1977. It was redesigned three times and then President Carter canceled it.

So what we should have had 10 years ago or 5 years ago at the very latest, we now have to wait another 4 years to get. But we aren't going to redesign it any more, we are going to watch the production very carefully, and we have a fixed-price contract. All of these things I think will bring us out on time and within the budget on that item. We are doing the same thing with the other very large items. The Trident submarine contracts have now been substantially redone for the future one and we will have this kind of close management conference on those.

When I got here I was told very casually that the *Ohio*, the very first of the Trident submarine class, was 2½ years late. That is something that I never want to hear again.

Senator **Stennis**. All right, that is fine.

Senator **Stevens**. Thank you, Senator. Senator Rudman.

Senator **Rudman**. Thank you, Mr. Chairman.

Mr. Secretary, I take it, following Senator Stennis' questions, that you have agreed over there that you have got to freeze things in place lest you have this continued escalation. You have done it with the B-1 I understand?

Secretary **Weinberger**. Yes, sir.

Senator **Rudman**. The Trident?

Secretary **Weinberger**. Yes, sir.

Senator **Rudman**. What about the M-1 tank?

M-1 TANK PRODUCTION

Secretary **Weinberger**. The M-1 tank is in production. It is coming off the production lines now. It was 20 years in the development. There were a great many redesigns, as Senator Stennis has said, and the costs went up all this time. Fortunately it turns out that we didn't actually need it during that period, but the worst thing is we didn't have this new tank.

IMPROVED SOVIET SYSTEMS

Meanwhile the Soviets have gone through two new generations. They have now got the T-72, which has been online for some years which the M-1 was originally designed to counter, and they have got the T-80 on the drawing board already.

Senator **RUDMAN**. Which it was not designed to counter.

Secretary **WEINBERGER**. Of course, because it was designed to meet the threats and the missions that it would then have to fulfill. Exactly.

Senator **RUDMAN**. Well, am I incorrect in stating that the Army has plans underway to start some advanced design changes on the tank at this time?

Secretary Weinberger. No, you are not incorrect. We now have to do the things that we should have been doing, and that is continually trying to improve what we have and not slow down the delivery of what we are trying to get but always looking ahead to see what threat it will have to meet.

KINETIC ENERGY DEVELOPMENT

There are a number of new developments in kinetic energy and in the ability of kinetic energy resistant materials and things of that kind that we have to examine carefully. We are now doing that. This ultimately would lead to the next generation of tanks.

You have got to have your equipment designed for the threats that it may meet. You can't send people out to fight in equipment you know is inferior to that which they might meet. So the M-1 went on the drawing board 20 years ago to try to defeat the next generation of Soviet tanks. It is a very good tank. It had all kinds of problems in development, but it is now at a point where it is coming on the line. It is needed and it will have a useful life, but it is only prudent to start thinking about the next generation.

U.S. DELAYS IN DEVELOPING NEW WEAPON SYSTEMS

Senator **RUDMAN**. Mr. Secretary, I am going to ask Chairman Jones about this because I am very interested in his remarks over the last several months. Doesn't this really indicate what is essentially underlying one of the central problems to the whole defense establishment? The greatest industrialized Nation in the world takes 20 years to produce a tank, 17 years to produce an infantry fighting vehicle while the Russians are producing weapon systems in a short span, less sophisticated maybe, but deployed in the field meeting at least the current threat?

I mean, don't we have to do something essentially central to the whole procurement process, central to the organization of the Joint Chiefs if we are ever going to have procurement that will have weapons on line at the time that the threat is to be met rather than 10 years late?

Secretary **WEINBERGER**. Senator, if I might say so, sir, in all due respect, you are making my speech. That is exactly right. Seventeen years is too long to develop these things, with the redesign, with the lack of attention to close monitoring to make sure on almost a week-by-week basis whether anything is going wrong, or adding to the cost or adding to the delay. These are things that have to be corrected.

Private industry does them and there is no reason in the world why the Government should not do them, too. So I am not going to argue one moment with you. We do have to do it.

The only argument I would have was you said perhaps the Soviet weapons are less sophisticated. Actually they aren't. They are very, very strong weapons and very modern and very complex and are the things ultimately that we may have to oppose in the field. For that reason we have to do very much the kinds of things that you and I are talking about. We have to do this whole process sooner and it is only prudent that we have in mind some work on a tank that may be 7 or 8 years down the line but will have to meet the T-80, whatever that will have in the way of armament and armor and so on.

DOD QUARTERLY REPORTS ON SAR

Senator **Rudman**. Well, as you well know, Mr. Secretary, last year appended to the authorization bill jointly sponsored by Senator Stennis, Senator Nunn, Senator Mattingly and I was a requirement that the Department of Defense report quarterly on the SAR reports in the 50 key systems.

I have the data extracted from those reports and there are approximately 20 of these, I believe, that are now exceeding 25 percent, a large number, and another number of 15 percent. You are going to be required under that amendment to certify to the Congress that each of these systems must be continued in the national defense.

Have you reached a conclusion on these systems that have resulted in these overruns as to whether or not you are going to make that certification?

Secretary **Weinberger**. Well, we are fully prepared to comply with that amendment, Senator. I don't know the precise status of those reports, but they will be in and we will look at them. We will furnish the required data.

PROBLEMS IN M-1 TANK AND IFV

The real problem here is exemplified by the tank and the infantry fighting vehicle. When you get a sunk cost over 20 years in a particular weapon and when you know you need a weapon of that description—we need a tank and I haven't talked to anybody who doesn't think we need a tank, and while the M-60 has served very well for a number of years it is clearly not a match now for the T-72—we have to do something about it.

When you get 18, 19, or 20 years of sunk cost into a thing and when you have expended all that time, even though the price has gone up because of redesign, because of inflation, and because of improper contract monitoring, you still have a very hard decision. You can scrap the whole thing and say we will get along with the inferior tank for another 6 or 7 years, or you can do your best and go ahead with what you have got, which is 20 years of development for the M-1 tank.

It is a very good tank and most of the problems have now been worked out of it. The same with the infantry fighting vehicle. Some people criticize that and they say, well, it carries fewer men, and so forth and so on. What it does of course is deliver far more firepower than its predecessor, which was essentially a truck. This now is a vehicle which can deliver firepower from a cannon and from a very sophisticated targeting process so that it is in a sense a small tank by itself. It gets the infantry up to the battle area and it delivers a lot of firepower at the same time.

You have got 17 years in the development of that. I think it was much too long. But, nevertheless, it is there, it is now coming into production and what do we do? We have got two decisions. You can scrap it and start over, or you can proceed with it and make sure that it will do the missions that are needed. The next thing you have to do in any event is to start looking at the next generation.

Senator RUDMAN. I have one final question, and Mr. Chairman, you will advise me if my time is up. I do have one final question for General Jones.

Senator STEVENS. Go ahead, Senator.

THREAT BRIEFING FROM DIA

Senator RUDMAN. Recently this committee received the threat briefing from the Defense Intelligence Agency and I think it was a very sobering experience for most of us. You are coming in with budget increases and as I think the Senator from Mississippi very accurately stated, many people who have been supporters of the defense budget in the past have some very grave doubts in light of the economy and the deficits to support a budget at this level.

In sitting through that briefing many of us felt that much of it which was highly classified ought not to be classified at all and that the American people maybe ought to be told directly by the President as to what this threat essentially is, which comes to my bottom line, Mr. Secretary. Don't you think the American people ought to be asked to pay for this defense buildup rather than to continue to finance it with deficits which will only add to your inflationary problems?

Secretary WEINBERGER. Well, Senator, I am really not going to be able to talk very much about the method of payment. That is, as they say, a different Department.

Senator RUDMAN. It seems we never have the right person in front of us to answer that question. [Laughter.]

Secretary WEINBERGER. The essential nature of the threat is as you have identified, it is growing and it is a sobering thing. I wish we could have more information declassified. The maximum we could get we published in a book called "Soviet Military Power," which contains a great deal of that information and has had quite a wide distribution, particularly in Europe. It was originally published at the request of the NATO Foreign Defense Ministers. That threat is what drives the budget and it is a little frustrating and difficult not to be able to discuss fully and openly all of the things that make us feel that the programs that we are seeking are vital. We very much hope that we will have enough time to bring them online. We don't know.

But as far as paying for them is concerned, I think that the President's program is one that we believe will stimulate the economy with the tax reductions and thus produce more tax revenue than is predicted. I am very hopeful that will take place and I am particularly hopeful that we will give that program an opportunity to work. We adopted it last year and we seem to have been more or less in many quarters, afraid to let it take effect. I think it will have the effect of stimulating the economy when the extent of the tax cuts are known. It has worked in the past and I would be very hopeful it would in the future.

Senator RUDMAN. Well, that may be true, Mr. Secretary. I for one feel that much of this program is needed. I think I disagree on some areas where savings can be made. But I also believe that the American people ought to pay for this defense buildup and we ought not to finance it out of deficits any more than we should finance anything else out of deficits.

The only time that that is going to happen is if the President and the Defense Department are able to tell the American people the true status of the Soviet threat. That is the only way we will have support for it.

I would like to ask General Jones just one brief question, Mr. Chairman.

General Jones, I have been very interested in what you had to say and you certainly are in a good position to say it, holding the position that you hold and have held.

I think implicit in what you have said is that strategic planning of a long-range nature, procurement and the whole area that we are talking about here today is subject to all kinds of parochialism and bickering and problems that are caused by the kind of structure that you have.

CONCENTRATING POWER IN CHAIRMAN OF JCS

The bureaucracy of the armed services is so huge and so scattered and so diffuse that you really wonder whether anyone really knows what is going on. Do you think that concentrating more power in the Chairman of the Joint Chiefs would start to solve that problem?

General JONES. Well, first, I don't like to use the word "parochial." That gives a bad connotation. I think competition among and between the services is very useful. You want each service to be convinced that if you give them a mission they can do it, that they can fight with their resources and do it.

To expect the leader of that service then to operate in a joint system where there is a conflict of interest, particularly if there are constrained resources, and to set aside that long 30-some years of experience in that service and also the institutional pressures and institutional obligations to their people is very difficult. That is why we in the military haven't done particularly well in the area of strategy and long-range planning.

What I would like to do is strengthen the joint system rather than put too much emphasis on strengthening the role of the Chairman. We have combatant commanders in the field, General Rogers in Europe, Admiral Long in the Pacific, and so forth. They don't have enough say in what is going on, whether it is in resource allocation or new programs. So it is the joint system that I would like to see strengthened. Where a committee is appropriate for action, let the committee do it. But for much of what we do, we need a monolithic organization with advice flowing from the commanders in the field, channeled through the Chairman who can provide the advice to the command authorities.

I would also like to see the service chiefs spend more of their time on their combat units working on discipline, readiness, exercises, evaluations, procurement, leadership, and management rather than spending three afternoons a week debating with the other Chiefs trying to come up with an agreement on something. I would like to limit that role more, not eliminate it, but limit it and allow them to spend more time in leading and managing organizations with hundreds of thousands of people spending billions of dollars. I think we would have a better Defense Department if we would go that route.

Senator **Rudman**. You will be making specific proposals?

General **Jones**. Yes, sir.

Senator **Rudman**. Thank you, General.

INCREASE IN JAPANESE DEFENSE OF PACIFIC

Senator **Stevens**. Mr. Secretary, we were supposed to go to Japan last fall but we stayed in session too late. This subcommittee was going to go over and talk to the Japanese Diet about the Japanese doing more to assist in the cost of defending the Pacific. What about that? What about the people of Western Europe who have a greater stake in the Middle East oil fields than we do being involved in helping to plan for the defense of that area? Are we getting any assistance from our allies as we go into this modernization program?

Secretary **Weinberger**. Yes, we are, Senator. Obviously we feel that we could all do more and that we all have to do more, but we are getting assistance. In Japan, after quite a long period of virtually level or no growth and in some years because of inflation negative growth, they did add 7 percent to their defense spending. As I understand it they have pretty much accepted in principle the idea that they have a role that they can and should play which is essentially the defense of their homeland and the patrolling and defensive activities in the northwestern maritime approaches guarding the sealanes out to 1,000 miles from Japan with antisubmarine warfare and antisubmarine watches and all the rest.

They have started on that path and we are very pleased that they have. I could not in all honesty sit here and tell you that that is enough, but it is a welcome start in the right direction.

INCREASE REIMBURSEMENT FOR U.S. FORCES OVERSEAS

Senator **Stevens**. Now last year you told Senator Hatfield, I am told in a letter, that increased reimbursement for U.S. forces in Japan and Germany could result in a net savings of $2 to $5 billion. Has that materialized?

Secretary **Weinberger**. There have been some savings of that kind and we can get you the exact amount.

[The information follows:]

REIMBURSEMENT FOR U.S. FORCES IN JAPAN AND GERMANY

In February 1981, Senator Hatfield forwarded a list of potential economies recommended by GAO and CBO for our views and recommended action which suggested we ask Germany and Japan for a reimbursement of $2-5 billion for our forces in those countries. In my response, I noted we would make a concerted effort to encourage our NATO allies and Japan to make a larger contribution to the common defense in general and more specifically increase Host Nation Support (HNS). Our endeavors along these lines have indeed met with some success. In 1982, Japan plans to increase defense spending by more than 4 percent in real terms. German intentions for 1982 are not yet clear but in 1981 its real increase approximated 3 percent. The NATO allies as a whole increased expenditures by about 2.2 percent to 2.6 percent. In 1982, Japan will spend nearly $1 billion on HNS on behalf of U.S. forces. The Germans have recently agreed to a wartime HNS package which will provide for 93,000 support personnel and they have agreed to start negotiations on other peacetime HNS activities.

I recognize that equitable burdensharing within NATO is of vital importance to both the United States and the alliance. It is equally important for our relationship with Japan. I share fully Congress' concern that the burden of NATO and the defense of Northeast Asia should be distributed equitably among the allies. This was a key issue in my recent trip to the Far East and we made some progress. I intend to continue to give the burdensharing issue priority attention and whenever appropriate, to press our allies for additional contributions—both in their national defense efforts and in measures that support our own—to insure that our common defense is shared as fully as possible.

Secretary **WEINBERGER**. In Germany very recently, and after a long series of discussions, they did agree to increase the host nation support which means that they have allocated about 93,000 people from their reserve force to assist in the forward defenses of the U.S. troop contribution to NATO. This would save sums that would otherwise have to be expended by us.

They have not added, in Germany, the sums necessary for infrastructure improvement; airfields, storage, and things of that kind that would also be necessary for the fulfillment of our commitment to NATO.

The NATO response to the threat has been varied. Italy has been particularly forthcoming and has made major improvements in their strength. England has done well, particularly considering the economic problems that they have. Germany this year will have either level or, I am afraid, a negative growth because of their inflation rate. The Netherlands has not done a great deal in recent months. Belgium is starting to do a bit more.

Generally there is a varied picture and we have in every forum and in every way we can, tried to point out the importance of all NATO nations doing more. We are frequently met in Germany particularly with the argument that while during the years the Germans were doing more we were not. So we have to bear that in mind when we urge them to do more this year.

GAS PIPELINE FROM RUSSIA

Senator **STEVENS**. Mr. Secretary, we see the Soviet gas pipeline being constructed to bring gas to Western Europe to supply them at least 20 percent of their energy supplies. Now, as I understand it, that is to go primarily to our NATO allies. If their industrial base or if their residential communities are all going to be dependent upon on gas from Russia, what are we doing over there spending so much money? Should we dust off the Mansfield resolution and bring these people home?

Secretary **Weinberger**. No, sir, you should not.

Senator **Stevens**. Why not? We can't get around to building the gas pipeline from my State now. It has been 13 years to get around to building that but we are building the Russian pipeline in 2 years. Yet it is our money, our taxpayers' money that is supporting the defense capability for Western Europe but they indicate they are perfectly willing to be relying on the Russians for 20 percent of their energy.

Secretary **Weinberger**. Well, Senator, the administration position is against the pipeline. Since the President announced that at Ottawa many months ago we have taken a number of steps to try to persuade the Europeans that the pipeline should not go forward. We are not paying for that pipeline. They are.

Senator **Stevens**. I know that, but isn't it an inconsistent position for us to be paying for their defense and their going over to buy gas from Russia in such great quantities?

Secretary **Weinberger**. We think the pipeline is a mistake and we have said so many times. They point out that they would have a small portion of their energy requirement depending on the pipeline. We do not think that is a desirable thing in any way, nor do we think it is a good thing to supply the Soviets with the hard currency gain that they will get from the pipeline because they will put it directly into additional defense expenditures as they have done with many of the trade and technology transfers that have gone on in the past few years without nearly enough examination, in my opinion.

WESTERN EUROPE AWARENESS OF SITUATION IN RUSSIA

Senator **Stevens**. Well, following on Senator Rudman's question, do the people of Western Europe know what is going on in Russia? Aren't we the ones that really have the intelligence gathering apparatus of the world now and are we telling them really what is going on?

Secretary **Weinberger**. We are. This booklet that I mentioned, which is the maximum we could get declassified out of the various threat briefings that we have all had, does present a chilling picture and it has been widely distributed. I can only answer that I hope we can do more because I think more people in Europe as well as at home should know the real nature or the growing nature of the Soviet threat.

We do feel, however, Senator, that it is enormously in our own interests, if nothing else, to make sure that Europe is not overrun. I don't believe we could exist in a world with a Europe that was overrun by the Soviets. So we have an enormous national interest in NATO as well as an interest that derives from a long history of shared traditions and friendship and similar values with those countries.

So on every count I would very much hope that we wouldn't get into the Mansfield amendment syndrome.

Senator **Stevens**. I might do it, I want you to know. I am getting awfully disturbed with an international community that will finance a Soviet pipeline into Western Europe but won't finance an Alaska pipeline into the Central United States. It is time I think that people started looking at their relative interests and why should we support defense in that whole area if they are willing to say, you know, business as usual and life as usual and we will just depend on the Soviets.

Secretary **Weinberger**. Well, I have pointed out many times, Mr. Chairman, in searching for ways to present effectively the arguments for increased defensive effort in Europe, the fact that isolationist sentiment is always very close to the surface in the United States and that the Mansfield amendment is a possibility. I think it would be disastrous from the standpoint of our national interest as well as from the point of view of the Europeans.

I also share your feeling about the concerns and dangers of that pipeline. The President has announced the administration's position. However, that pipeline is very far advanced, and when we talked to most European countries about it they figuratively shrug their shoulders and say it is too late. All of these commitments have been made in past years, but our feelings about it fully match yours, that it is an undesirable and very unwelcome dependence, even if it is only a few percentage points that would be built into our European allies in connection with their energy supplies.

Senator **Stevens**. I want to get back to Senator Stennis here in just a minute, but let me ask you one more question and then the general one question.

RELEASE OF INFORMATION FROM INTELLIGENCE COMMUNITY

Following up on what Senator Rudman said, you and I personally had a conversation about this the other day and we agreed on this, but why is it that we can be sitting in a classified briefing, be told about the new Russian strategic bomber and the developments that they have in submarine warfare and in their Navy and in their overall attack units on the ground and our people don't know about that? Why can't we tell more to the American public that we have learned without disclosing the means of interception of this information and without jeopardy? I know you have tried to do it, but there just doesn't seem to be any willingness on the part of the intelligence community to let us share this information that we get.

I sometimes feel a little schizoid. I go out around the country and people say, well, why do you need all this? We have in the back of our minds all of these classified briefings and can't share them.

Secretary **Weinberger**. Well, Senator, you are mirroring my frustrations. I have to tell you that it took about 3 or 4 months to get the declassification of the material in the "Soviet Military Power" book. I am glad we did. It is apparently more than has been revealed in the past.

Essentially, as I understand it, it is a protection of the sources that is at the root of the intelligence community's reluctance on this. They have their responsibilities and their own special knowledge and we argue very strongly the exact points you have made.

Senator **Stevens**. The more money we make available to them the more they increase their classification. They don't decrease it. I think we ought to just start cutting off some of their money until they tell the American public what they have learned with the money we have given them already.

Secretary **Weinberger**. Well, a very substantial amount has been learned.

Senator **Stevens**. Well, a very substantial amount may be cut. We are going to have a hearing this year on the impact of the intelligence community from the point of view of their really destroying the support for the modernization effort of our defense forces by refusing to provide the information that we need to demonstrate this threat.

General.

General **Jones**. Let me make a point. First, I don't think it is capricious action on the part of the intelligence community. We review what they do, and maybe we disagree on certain areas, but the book that was put out last fall is a remarkable book that outlines what the Soviets are doing.

In all candor, we are having trouble getting Members of Congress who are cleared for the briefing to sit still long enough to receive that briefing. We would like to expose them to it. Recently we have been able to get to a number of Senators with the unclassified briefing—there is more unclassified information available than people think.

Secretary **Weinberger**. There certainly is no doubt in my mind, Senator, that you are completely right. The support for the defense budget would be infinitely aided if people could see the things that you have seen and we have seen in these classified briefings. They are chilling experiences and they instill one with the responsibilities that I have as well as a sense of enormous urgency.

That is the reason for the budget in the form that it is before you. We are trying in every way we can to develop enough of this kind of knowledge that can be circulated to the American people. The book itself, I think, is a very important start in that direction and I would commend it to you. We have some more copies we can make available.

REORGANIZATION OF JOINT CHIEFS OF STAFF

Senator **Stevens**. My question to you, General, is how soon will you be able to tell us about your recommendations for reorganization of the JCS?

General **Jones**. I would expect in a few weeks. We understand there may be Congressional hearings sometime late in April so certainly before then.

Senator **Stevens**. Now you have spent a good portion of your life over there and certainly ought to have the perspective. We all have great confidence in you and I think you have done a tremendous job in your role, General.

General **Jones**. Thank you.

Senator **Stevens**. But we wouldn't want to see this get lost in the very maze that you are trying to straighten out. Is that possible?

General Jones. It is possible. The system is remarkably resistant to change. People have tried many, many times. The difference is that insiders are working it now as opposed to before when outside blue ribbon panels recommended the changes. But we are trying to keep the pot stirring and we will address it with the Chiefs very shortly; we have begun discussions already.

Senator STEVENS. Is the Secretary involved in this? Is there something that can be done by administrative order, or is it going to require legislation?

General JONES. Certain things can be done by the Chiefs themselves. Some would require Executive action and some would require congressional action at least on the recommendations I have. The ball is in our court right now, in the Chiefs', to come up and address the issues and either agree or disagree and then to go to the Secretary of Defense with specific recommendations. In some cases we may agree and in some cases I am convinced that we will split with different recommendations. Then action by the Secretary and involvement of the President will be necessary, and the Congress subsequent to that.

MONETARY ASPECTS OF REORGANIZATION OF JOINT CHIEFS OF STAFF

Senator STEVENS. This committee's interest, of course, is in the monetary aspects of the reorganization. To what extent is that being taken into consideration, the fiscal control as far as the services are concerned?

General JONES. There could be some minor impact. For example, I think the total number of people in the Pentagon could be reduced as a result of the organizational changes. There would not have to be so many people in the services deeply involved in what goes on in the joint arena, but that will be a nominal savings compared to the overall budget. This is not related to the 1983 budget. This is long term. This is better planning, long-term planning and better strategy that would shape our advice for the future. So it is not a quick fix that all of a sudden comes up with some magic savings in the 1983 budget.

Senator STEVENS. Senator Stennis.

Senator STENNIS. Well, I will be quite brief, Mr. Chairman. I walked in just as General JONES was concluding his statement and didn't get to hear what he said about the Chiefs and the reorganization but I have read about it. I didn't go through the debate about the creation of the Joint Chiefs. I got here right after the thing had been signed into law, but the smoke and the debris and the noise was still around. [Laughter.]

I got the benefit of all that and I don't want to go back into this now. It is too involved for me. But I think you have made timely points, General JONES. I think you have been through more than the average that the Chairman of the Joint Chiefs has to go through and you handled yourself mighty well. I think I am in a position to know a little about it and I am proud of the way you have responded to the additional strains.

General JONES. Thank you, sir.

Senator STENNIS. So you are certainly qualified to speak on this subject. It will just take some time and delicate dialogue to work it out among knowledgeable people like you and the Secretary and others.

MANSFIELD AMENDMENT

Now we are talking here mighty strong about redoing this Mansfield amendment, Senator.

Senator **STEVENS**. I just think we ought to dust it off, Senator.

Senator **STENNIS**. I know. Well, I don't blame you at all. I have been on the other side of this thing all along. The first vote I cast in the Senate was on a small measure which was a prelude to the Marshall plan and later came NATO, and I have been right down the line. But I think people are waking up. They have learned more about it, and the whole story is disclosed about the extent that we have funded military aid to other countries including Japan and West Germany, I will name them with the others. They are worthy people. But the American taxpayer during all this time has been paying a tax which was fairly easy to pay but now it has become a burden. It has become a burden and it just goes up and up. I think you are going to hear from them this year.

I was there and active on the floor in the time of the Mansfield resolutions to bring home a large portion of our troops supporting NATO.

Senator **STEVENS**. I was, too, and I voted against it, but I am liable to introduce it if it keeps up.

Senator **STENNIS**. I know the reverberations there, and I know other Senators were involved besides me, of course. Senator Russell was still here but he was not fully able to carry on his business. I know when that resolution went in with the names of 44 Senators. I said here is where we go under. I just didn't see any way out. That called for half of the troops I think to be brought home within "*x*" days. It didn't pass. There was a lot of divided opinion.

Now the facts are much more prevalent, and energy problem is one of the most striking things I think. They needed the fuel, of course, but I think the reason they just went on and did it anyway is they didn't think we would do anything about it. I say that with all deference to those fine people. If we lose West Germany, we have lost most of Western Europe.

So I think this is very serious and has got to be explained further and better. I know the facts are out and this is going to be something the military is going to have to answer for in a way. The military didn't warn us much. General, you didn't warn us about what was happening over there along this line. I was surprised that they got it through and we are the ones that will be called on to explain that to the people.

I haven't made up my mind, Senator Stevens. I respect your judgment and all. I don't know whether it ought to be brought up right now or not for a decision before we can get some of these other matters settled.

You wanted to say something, General.

U.S. PRESSURE ON EUROPEAN ALLIES

General **JONES**. Clearly, Senator Stennis, we should keep the pressure on our allies in Europe and in Japan. When the Secretary and I meet with our counterparts in Europe that is the No. 1 item on the agenda.

Senator **STENNIS**. It is your No. 1 item?

General Jones. Oh, yes, every time. It is the No. 1 item.

Secretary Weinberger. We warn them, Senator, that is exactly the kind of sentiment that has been expressed here this morning is likely to follow if these tendencies either toward not sufficient defense expenditures or the pipeline or other things are followed.

Senator Stevens. They don't believe you, do they, General.

General Jones. No, but we have had a Mansfield threat before with 44 or 45 Senators signing up. We don't respond well to threats from our allies, and I don't think our allies will respond to a threat from us on Mansfield. Then if we implemented it, that would be a tragedy.

Senator Stevens. Why would it be a tragedy if they are willing to have that kind of commerce with the Soviets day in and day out?

General Jones. Our troops are over there to defend the United States. If we lost Europe it would be a tragedy for the United States because for us to maintain our society with Europe overrun by the Soviet Union would be very, very difficult.

We have seen how costly isolationism can be to us in the past two wars. Therefore, we ought to recognize that our troops are there to defend the United States and to work in cooperation with our allies and to help in their defense also. But the primary purpose is for the United States. I would much rather defend in Europe than some place back from Europe and increase the possibility of Europe being overrun.

DEFENSE OF UNITED STATES AS ISLAND COMMUNITY

Senator Stevens. General, I don't know about the other Senators, but I am not convinced that we are in a situation now that is comparable to World War II with all of the missiles that Senator Stennis mentions and the very large budget items we are talking about in terms of the long-range manned bomber and all of the increased defensive capability, new aircraft carriers, and the new Navy.

That is based on the concept that we are an island community and we need defense. It is not based on defending ourselves in Europe and I don't know why we need to maintain the forces in Europe if they are going to have a daily commerce with the Soviets on which the Western European economy relies. If they get to the point where they rely upon the Soviets for their daily energy, then I don't see any reason for us keeping our troops there at all.

General Jones. We don't have an island strategy. We try to have a balanced strategy. If we didn't have our troops there and they overran Europe, we don't have the Navy or the airplanes or whatever to try to reinvade Europe and to retake it.

Senator Stevens. Sorry, I interrupted you, Senator.

Senator Stennis. No, I was through. Thank you.

Secretary Weinberger. The simple fact is that we serve our own interests enormously by being there and that is well known. We would not have a substantial financial savings by doing that. We would not be able to dismantle these divisions that we bring home. We would have to have that. In fact, we could make a very good argument that the defensive needs of the Nation would rise if we didn't have the opportunity to defend in forward defensive positions.

It is a difficult thing to watch, as I see it, the naivete which guides the decisions to go ahead with a pipeline of that kind. They respond by saying that it is only going to be 5 percent of their energy requirements in 1 year or 2 and it is a redundancy thing which they have to do and so on.

I worry very much, and tell them about the hard currency benefits they will bring to the Soviet Union when this pipeline is completed. I think, as the President has said many times, this pipeline represents a change in energy supply in Europe and a dependence that he feels is wrong.

I have to tell you that thus far our efforts to try to persuade them of this and to turn them to alternate sources have not been successful. Mostly they say it is too late. But one way or another I don't think that our disappointment with that action should ever be the basis for our overlooking the enormous value it is to the United States and how enormously it is in our national interest to help defend Europe.

U.S. BASES RELIANCE ON RUSSIAN PIPELINE GAS

Senator **Stevens**. Are our bases going to be on power systems that will be fueled with that gas?

Secretary **Weinberger**. Not that I know of, no, sir.

Senator **Stevens**. Well, look into that.

Secretary **Weinberger**. We certainly will.

Senator **Stevens**. Because it does seem to me that if they can turn off our lights that we ought to be getting the devil out of there. That is all there is to it. [Laughter.]

Secretary **Weinberger**. If the contention of Germany and France that all they are getting is 5 percent is correct, why that would not be as much of a danger as you have just pointed out. Also, most of our major troop installations are on their own auxiliary power systems.

Senator, I am not going to argue with you that the pipeline is a good thing because I think it is not. I think it is a very bad thing for Europe and a very bad thing for the United States. But the Europeans that we have talked to seem to feel that either they have progressed too far with it or that we are overstating the dangers. We regularly have arguments about this.

The President's position at Ottawa is quite clear, but it is very true that we do not have the power to tell them to stop this. All we can do is argue with them and try to present these arguments.

The point I have is that all of the valves on this pipeline are going to be in the Soviet Union and whatever percentage it is that they will draw out of it they will start depending on at least that percentage. As you say, the ability to shut it off is going to be with the Soviets.

Senator **Stevens**. Let me turn to Senator Rudman and then Senator Andrews.

U.S. VOTER CONCERNS OVER AMERICAN FOREIGN DEFENSE PROGRAMS

Senator **Rudman**. Just to follow on very briefly, Mr. Secretary, of course we are getting it at both ends. On the one hand, our constituents wonder just what is going on with our defense of Western Europe with this pipeline, and, on the other hand, the Japanese, who pay great lipservice to our foreign policy, find ways to circumvent that lipservice to now sell the pipelaying equipment that would have been produced by American workers in the Midwest (who are now unemployed by, I believe, the Caterpillar Co.) and yet we continue to do more than our fair share of the defense of the Pacific.

So I simply want to say to you that this is not your direct problem, though you are involved in it, and that there is more sympathy out in the country for the kind of thing that the chairman is talking about than I think you and the administration realize.

Secretary **Weinberger**. I don't disagree with you all, but only on the point that we may not realize it. The points you have just made are points we make frequently in private discussions with our allies on both sides of the world. We try to be as effective as we can about it. General Jones has said correctly that they don't respond well to threats or to open hammering, so to speak.

The points you have made are the points we make, too, that there is this sentiment in the country and it could be extremely harmful to the defense of the free world in all parts of that world.

Senator **Rudman**. Mr. Secretary, let me just briefly ask one question and then yield to Senator Andrews.

IMPACT ON DEFENSE BUDGET SIZE

The recent report of the President's Council of Economic Advisers made some very interesting observations on the size of the defense budget and its impact. They made a number of points.

One of the points that I thought was very serious was this one, and let me just read from the report. They said that "Increased demand in the defense budget may produce delays in the delivery of some military goods. Delivery timetables that seem realistic today may in some cases become obsolete as producers try to accommodate the defense buildup and vigorous expansion in civilian investment at the same time." Now this is from the President's economic advisers who I think are probably as good a source of evaluation as anyone.

They made a number of other observations, none of which particularly agree with some of the testimony of your Department before other committees. How do you respond to this?

Secretary **Weinberger**. Well, I think their conclusion, Senator, was that the economy could respond to this, and that the demands that would be placed on the defense portion of the economy were not excessive, given the assumptions that there will be these multiyear procurements and other rather firm signals that we are embarked on this kind of a rearming of America path, and that the defense industrial community would respond to that and could respond to it without injury to it or to the domestic economy. I know those cautionary remarks are included in the report.

My impression is that the conclusions, and particularly the statements of the chairman, Mr. Weidenbaum, have been quite clear that we could accommodate to the buildup that is requested.

Bear in mind again, sir, that the increase in the defense budget looks large, and it is large. It is very large. But the simple fact of the matter is that 50 percent of it is personnel costs and a great deal is based on completing commitments already made which, by definition, the industry is already geared up to handle.

Senator **Stevens**. Senator Andrews.

FOOD SHIPMENTS TO SOVIET UNION FROM UNITED STATES

Senator **Andrews**. Mr. Secretary, I was interested in your discussion of this pipeline coming from the Soviet Union. Let me look at it from a little different way and I might show my mid-American bias. But if it is bad for the West strategically to have Europe dependent on the Soviet Union for supplies of fuel energy, then why isn't it good for the West to have the Soviet Union dependent on us for supplies of food energy which are far more important than fuel energy, important as fuel energy is?

We find the same group of people that are saying how tragic it is to have Europe becoming dependent on the Soviet Union for 5 or 10 percent of their gas supply also saying that we shouldn't ship any grain or food or whatever to the Soviet Union.

Secretary **Weinberger**. Well, the administration is not part of that group, Senator. As you know, the President lifted the embargo and grain sales are going ahead.

SOVIET DEPENDENCE ON U.S. GRAIN SUPPLIES

Senator **Andrews**. That is right, but there are a couple of members in the Cabinet who seem to think that that is something that we shouldn't be doing, and there is a good deal of comment around the country that this is a mistake.

I would think that the administration would be plowing ahead on the basis that if we can get them dependent on us for vital food energy, it is just as strategically in our best interests as we are concerned about them getting Europe dependent on them for some of their fuel energy.

Secretary **Weinberger**. Well, there are two or three points about the pipeline that I think are quite different than that, but the administration's position on grain embargoes I think is quite clear and is completely supported within the administration and has been announced by the President.

On the pipeline, it isn't only the dependence of Europe for 5 percent or 7 percent or whatever it turns out to be of their energy on the Soviet Union, it is the provision to the Soviet Union of upward of $10 billion of hard currency which is the item in which they find themselves in greater shortage now. That I think can do a great deal of damage because trade with the Soviet Union is not like trade with other countries, France or Germany or Japan or whatever.

The trading profits go directly into the military. Their only success story is their military expansion. Their economy is in wretched shape and their quality of life at home is such that neither you nor I would tolerate it for 5 minutes. Nevertheless, because they are able to put very large percentages of their total resources into military work, they have managed to make substantial additions to their strength and they continue to do so.

The provision to them of hard currency that will come from the pipeline is a very disturbing factor. It is one of the points the President made at Ottawa and has made repeatedly since.

Senator ANDREWS. That is another one of the points of course of selling grain to them, it soaks up our currency because we don't give them soft terms or anything like that. I don't want to dwell on that.

Secretary WEINBERGER. Well, they are getting increasingly soft terms from a number of sources for the grain.

NEW DEFENSE SYSTEMS PRIORITIES

Senator ANDREWS. I don't want to dwell on that point. The question that my constituents raised most often of course when I was home was, one, their concern over the high interest rates, the outyear deficits and the military budget which seems to be going up and up and up and the number of new systems that seem to be thrown at us in almost a hodge-podge. We have got a C-5, we have got an MX, we have got a B-1 and we have got a whole host of other things and they are more or less put out on the platter.

Do you have a priority list where you will prioritize to this committee or have you submitted already, and if you have I don't want to belabor the point?

Secretary WEINBERGER. We have made major submissions, Senator. We do have priorities and the first priority is to acquire, as I said at the beginning of the hearing, a degree of strength that will deter Soviet aggression against us. We think that is achieved when the Soviets will correctly perceive that if they do launch a first strike they will be met with a retaliatory force that will inflict on them a cost they will find unacceptably high.

In order to get that we do need a number of things. We have talked about modernization and we have to modernize all three parts of the Triad of strategic weapons at once. That is a difficult and expensive thing to do.

The President's program was submitted last October for that and it will cost $180 billion. No one could ever say correctly that that isn't an awful lot of money. It is a very expensive program. It is about 15 percent of the budget and this is, I think, a proper allocation.

Fifty percent of the budget is personnel and we have to get our conventional forces strong so that we don't have to resort quickly to nuclear warfare. Getting the conventional forces strong is a very big part of this budget.

But we do have priorities within that and one of those priorities is increased air and sea lift. That is reflected in the request for the purchase of transports and tankers. Another of the priorities is to improve greatly the command, control, and communications. Another of those priorities is to improve the readiness and the sustainability of our forces which calls for a larger increase in ammunition and reserve supplies and a large increase in the amount of fuel and ammunition for training and manuevers and things of that kind.

The problem with the defense budget is not only that it is very large and it is going to continue to grow, but that when you do that on top of two existing factors, one, our own neglect during the 1970's and, (2), the Russians' steady increase since the 1960's, you have to do a lot of things. You have to have a lot of priorities.

You can't say that I will give up air and sea lift and concentrate only on more ammunition this year, because the simple fact of the matter is you need both. You do what you can within that spectrum of needs. You can certainly make priorities as we have done, and I think 15 or 14 percent is a proper amount to allocate for strategic forces.

ALLOCATION OF ITEMS IN PRIORITY ORDER

Senator **ANDREWS**. But can you allocate those that you have outlined in one, two, three, four, five order? You can do that for the record, Mr. Secretary.

Secretary **WEINBERGER**. We can do that.

[The information follows:]

DEFENSE POSTURE

The fiscal year Defense budget supports our objective to enhance both existing and long-term military capabilities. This entails the following areas: people; conventional force readiness and sustainability; mobility forces; modernization and expansion; and strategic forces. These are the things that will strengthen our ability to respond to any aggression. Combined, they represent a balance of priorities leading to one goal—an improved defense capability.

Secretary **WEINBERGER**. If that results in an item that is very close to being fully as important as No. 1 getting cut, then we have substantially diminished our capability and degraded our ability to respond in time to the Soviet buildup.

We have dropped out a number of things, Senator, that although important, we didn't regard as quite as high a priority as the things that are in the budget. What I would like to emphasize is that we have already made cuts in this budget below a lot of the requests and below a lot of the service demands.

MX MISSILE QUESTION

Senator **ANDREWS**. Well, Mr. Secretary, one final question. I think the quandry that our people are faced with is summed up really in this missile with its missile here, missile there and missile everywhere. This whole business of the MX is one of the most difficult things for practical middle westerners to understand, and these are the people that are in favor of a defense establishment.

They have been told, and you just alluded to the fact that we have to keep our Triad strong and we do. We understand that the reason for an MX was because our Minutemen III's were targetable.

Secretary **WEINBERGER**. That is right, and they are not strong enough and not accurate enough.

Senator **ANDREWS**. So now what we read in the Washington Post and everywhere else is that we are building MX's to put in Minuteman silos. Hell, if the Russians have got a Minuteman silo targeted now so we need an MX and they can wipe out three warheads and we stick a 10-warheaded bird down there, we are giving them 10 for 3, and that is a hell of a cost effectiveness to be giving the Russians that I don't think makes much sense and our people don't think it makes much sense either.

Secretary WEINBERGER. Can I try to give you some ammunition to answer the people who are talking this way?

Senator ANDREWS. Sure, because they are confused and I am kind of like the little boy who wanders into the chicken house and drops his bubble gum on the floor and he becomes confused. [Laughter.]

Secretary WEINBERGER. Another way to become confused is to buy the morning paper and read it.

Senator ANDREWS. Well, that might be true, Mr. Secretary, and that is why we have these hearings to shed a little light.

STRENGTHS OF MX MISSILE

Secretary WEINBERGER. Let me try. The MX, when we got here, was completely designed and within a few months of being ready to start production. It is a stronger, heavier, more accurate missile with 10 warheads instead of 3. It will start coming off the production lines in 1985. It is important to get the kind of a basing system that will be survivable.

We did not believe that the so-called racetrack system of 4,600 holes for 200 missiles and various transporters was a good system. The President campaigned against it. He made a couple of talks against it months before taking office and it was widely known that he didn't favor this system.

We re-examined it when I arrived, at his suggestion, to see if we had been wrong or if there was something that warranted continuing with it. We concluded that there was not, he agreed, and that basing system was canceled. It is one of the things that was canceled. A lot of people say you haven't canceled anything. We did cancel that.

Senator ANDREWS. You canceled it, but we don't know what is new and we are buying an MX. It is like buying a Rolls Royce without having a garage.

Secretary WEINBERGER. No, sir. We know that the stronger, more accurate missile that can destroy Soviet targets that are now hardened far beyond ours is necessary. We know that the Minuteman is not as accurate as it needs to be and it is vulnerable. It will take some time to find a basing system that we believe is far stronger and will make the missiles far more survivable.

After all, the MPS, the racktrack system, was a long time in development and changed three times on the way to completion. As you know, Congress said last year, to go ahead and develop a better system but tell us your recommendations by July 1, 1983. We are engaged in trying our best to fulfill that deadline.

There are two or three much more promising modes of deployment. We know that with the recommendation to go to the Congress by July 1, 1983, that the final action on it will not come before 1984 and that whatever it is will take some time to acquire.

SILO BASING NOT CONSIDERED AS PERMANENT MODE

Senator **Andrews**. So what you are telling the committee this morning is that dropping these birds in the Minuteman silos is not the way they are going to be deployed?

Secretary **Weinberger**. Oh, of course not. It has never been targeted as a permanent basing mode. Your alternatives, therefore, are either to leave them in the warehouse as they are finished or to put them where they could be launched if the horrible necessity should ever arise. The latter is essentially what we are doing.

We were also criticized by some who said we had changed our minds again and decided not to harden the Minuteman silos. Respectfully I had to point out that we did not change our minds. Our minds were changed for us by the Congress which forbid us to harden these silos except in connection with a permanent basing mode including BMD.

So we have been perfectly consistent about it. We didn't feel that the MPS system was sound. We did not want to devote the anywhere from $40 to $50 billion necessary to complete it knowing its lack of survivability. We do feel it is necessary to devise a better method. The temporary method we have always referred to—putting these MX's in existing silos—has been part of the plan from the beginning and they will go into existing silos. We would still like to harden them. Congress has forbidden that.

Even so, it is better to have them in the ground and able to be launched with their greater accuracy and their additional number of warheads than to leave them in a warehouse. But no one has ever said it was a permanent method of deploying them. That is what we will report to you, our recommendations for that permanent method, by July 1, 1983, which is the deadline that the Congress has given us.

Senator **Andrews**. Thank you, Mr. Chairman.

Senator **Stevens**. Senator Stennis.

M-1 TANK

Senator **Stennis**. Just one question. Back to the old tank problem. You say that Soviet tanks are first class in your opinion?

Secretary **Weinberger**. Yes.

Senator Stennis. What about the production now and the money in the bill. You are satisfied as Secretary of Defense that the word is go right now for the tank?

Secretary **Weinberger**. For the M-1 tank?

Senator **Stennis**. Yes.

Secretary **Weinberger**. Yes, sir.

Senator **Stennis**. And you do that in your responsibilities as Secretary of Defense?

Secretary **Weinberger**. Yes, sir. I would obviously a lot rather not have had 20 years go into the development of it. I would a lot rather be farther along on the next generation and I would a lot rather that some of the bugs had been worked out earlier, but I am persuaded that the proper decision now is to go into production and to get this tank, vastly improved over the M-60, and to have it ready just as soon as possible for the troops. It is now being deployed to the troops.

Senator STENNIS. Well, that is very good. The reason I ask you is that so many have been mistaken on that before and I just wanted to be sure that you have had time and had looked into it personally.

Secretary WEINBERGER. Oh, indeed, sir. I think that unquestionably there had been a lot of bugs in it and a lot of problems with it and a lot of things that, in retrospect, were all wrong and we would have done differently. The simple fact of the matter is that we are faced with a reality, a condition and not a theory, and we need a tank. This is the one that we can get most quickly and it is the best one that we can get now.

Senator STENNIS. Thank you very much.

Secretary WEINBERGER. Thank you, sir.

Senator STEVENS. Let me ask just a couple of questions now about the details and they are big details, Mr. Secretary.

REAL PROPERTY MAINTENANCE

We added $200 million to the 1982 request for real property maintenance. Now we have a budget supplemental that has come in for $400 million more and we have a funding level at nearly a half a billion dollars above what we had a year before. Is it necessary to have that type of increase at this time?

Secretary WEINBERGER. Senator, we think it is in view of the backlogs that have built up. Even with the supplemental we won't bring the backlogs down to zero. The deferred maintenance is unfortunately a very quick way to save money and a very bad way to save money because your only savings is in year one. After that it costs you a great deal more. We have a lot of deferred maintenance that has gone on and been deferred for a number of years and we are trying to clear that out as one of the first steps toward improved readiness.

Maybe General JONES would want to add a word on that.

Senator STEVENS. Well, General, we also have a $2 billion increase in ship and aircraft depot maintenance in 1 year.

PLANT DETERIORATION

General JONES. We have had, as the Secretary said, a great backlog. Our plant has deteriorated. We haven't put enough money into our plant to continue its maintenance and it has gone down hill. This is true of overhauls. We have ended up with additional backlog and these are clear readiness items that we ought to fully support.

Senator STEVENS. We have an $8 billion increase in O. & M. and a $4.4 billion increase in research and development in 1 year. At a time when there are many people attacking the budget we are going to have to have more justification for all those increases.

AVAILABILITY OF JUSTIFICATIONS

That gets me back to the question, Mr. Secretary, of what are we going to do about getting some detailed justifications?

Secretary WEINBERGER. Senator, that was the subject of a staff meeting yesterday at which I made, I believe, unmistakably clear the necessity of getting the justifications to you at the earliest possible date and I think we are moving on that.

Could I read just one point here about the backlog of real property maintenance. There was a congressional direction that we contain the accumulated backlog to the 1978 position which was $2.3 billion. That was the accumulated backlog in 1978, $2.3 billion. We have tried to do that with the funds that have been made available, but that backlog just inevitably keeps building and we are now at a $3.9 billion level in the backlog.

The additional $400 million is to try to help meet this goal that the Congress established of containing the backlog to no more than the very large sum that it was at the end of 1978. That is essentially what we are trying to do and why we have asked for that additional $400 million.

REWINGING AND REENGINING OF C–5

Senator **Stevens**. Well, we have a lot of other questions, Mr. Secretary, that we are going to ask of those that come behind you. I want to tell you, though, that some of us are a little bit concerned, I wouldn't say disturbed, but we are concerned over the decision to rewing and to reengine the C–5 after the CX program was eliminated last year.

Secretary **Weinberger**. There again is another good example of the elimination of a new program and the acquiring of the capability by the modifications you have spoken of to the existing plane. Essentially the justification is that we can get greater airlift sooner at the same or slightly less cost by proceeding that way rather than designing a whole new airplane with the delays that are inherent in that.

Senator **Stevens**. Why does the C–5 have to be rewinged and reengined in order to be suitable?

Secretary **Weinberger**. I think part of it is frankly that the original design and the original equipment was not as effective as it should have been for the huge job that is expected of that plane. Again, we are correcting mistakes, if you like to put it that way, that were made before. But we do know this. We have learned this lesson from the past few years experience with the plane and obviously we do not want to redesign the plane. If you are talking about a new engine and a strong enough wing, it is, as you said a moment ago, not a detail. It is something that we have to have complete confidence in.

General Jones has a point.

General **Jones**. Mr. Chairman, we are not reengining. We are improving the wing to give it 30,000 hours of service life. This program has been underway for 4 years and it is proceeding very well. We started research and development in our hearings back when I was Chief of Staff of the Air Force 4 years ago.

CX

Senator **Stevens**. Why did the CX come to us then, General? If this one has been underway for 4 years what was the CX doing in here last year? We had to cut it out.

General JONES. We have a very small number of 70-odd C-5's which are totally inadequate to do the outsized airlift job. So we have to not only make the best use of those C-5 aircraft that we have and to get extended life and better utilization but we need to increase our airlift very, very much.

There were a number of candidates to increase the civil reserve air fleet. That is a problem now because there is no production of large aircraft. Also, this wouldn't give you your big outsized capability such as the C-17 or the C-5.

C-17 AIRCRAFT

As the Secretary said, the C-17, a new airplane, would have some additional capabilities, but would enter the inventory something like 4 years later than the C-5N. So this is a new C-5. It has got some improvements but there is no research and development required and it is ready to go into production. The manufacturer called it the C-5N and we then designated it as C-5B which would give us the increased airlift capability which is badly needed.

SUPPORT FOR CIVIL RESERVE CONCEPT

Senator STEVENS. Well, Mr. Secretary, and General, I think that is one of the things that bothers some of us that have been supporting the military effort. I think Senator Stennis and I and others, and he longer than I, have been supporting your requests year in and year out. But here is a situation where if we go that route we decrease support for the civil reserve concept and these are not things that will be off the shelf for the private sector. There is no one in the private sector that is going to buy a C-5 or a C-5N. That is what we wanted to do. We wanted to increase the utilization of these aircraft and have them available to us in times of emergency.

General JONES. We are still proceeding in that way.

Senator STEVENS. You can't if you take the money and put it into C-5N's at a time when we have such a heavy deficit.

General JONES. There aren't aircraft coming off the production line now with widebodies that we would end up modifying that would be able to carry the cargo.

Senator STEVENS. But that could have been worked out if we had done it right instead of relying upon the civilian community to buy the aircraft that will have some military capability in times of emergency. We are in the situation because the civilian community can't afford it right now. We are going to buy more for the military and buy them on time and on a deficit basis and force the private sector even further into debt.

General JONES. That is apples and oranges. The civil reserve air fleet airplanes will not carry what the C-5 will carry, the big equipment, lots of equipment.

COST ANALYSIS FOR RECOMMENDATION OF C-5

Secretary WEINBERGER. We do have a very extensive plan for use of commercial reserve planes and we also have, Senator, and I would be very glad to supply it for the record, a complete cost analysis and cost effectiveness consideration as to why we did conclude that we should recommend to you this modified C-5 as opposed to the development of a whole new C-17 or CX plane.

Primarily it comes down to the ability to get badly needed airlift much sooner in a tested plane in which the various problems have been worked out.

[The information follows:]

C-5/C-17 Cost Effectiveness Considerations

The overriding consideration in the choice between the C-5 and the C-17 was the conclusion that a significant airlift shortfall exists now. To reduce the shortfall as quickly as possible, we concluded that C-5's could be produced up to two years faster than C-17's and could offer as much as 3.8 million ton-miles/day more added airlift capacity by 1987.

To establish a baseline for comparison, we began with the proposal from the Lockheed Corporation to build 50 C-5's, of which, 44 would be operational or PAA (Primary Aircraft Authorized) aircraft. We adjusted Lockheed's cost estimates and delivery schedule for those considerations we considered essential for a viable program. We also estimated the probable 20-year operations and support costs for a program of 50 C-5's. The profile considered at that time is shown below, with the last aircraft being delivered in 1988.

[Dollars in millions]

	Fiscal year—				
	1983	1984	1985	1986	1987
Budget authority (TY)	$760	$2,010	$2,315	$3,082	$4,255
Aircraft procured	2	10	12	20	6
Aircraft delivered			3	12	16

The C-5 life-cycle cost estimates, in fiscal year 1981 constant dollars, were, for 50 aircraft:

	Billion
Program acquisition	$6.1
20-year operations and support	8.0
Total 20-year life cycle costs	14.1

Next, we applied an enhanced funding profile to construct an equal-capability C-17 program with a fiscal year 1987 Initial Operational Capability. Because capability comparisons are highly scenario-dependent, establishing accurate trade-offs with C-5's proved quite difficult, with capability ratios varying from 1.0 to 1.6 C-17's per C-5. (These variances resulted from differing types of cargo in different scenarios, aircraft utilization rates, airfield throughput, operations at small, austere airfields, reliability, etc.) For purposes of comparison, we selected a ratio of 1.3 C-17's per C-5 as representative. Thus, 57 PAA C-17's would provide about the same airlift capacity as 44 PAA C-5's: about 8.2 million ton-miles per day. A total buy of 64 C-17's would yield 57 PAA aircraft, according to current guidelines.

By applying the enhanced budget profile to a C-17 effort, we concluded that a modest acceleration was possible, but that the buildup rate was slower than the C-5's and that the 64th aircraft would not be delivered until 1990.

The C-17 life cycle cost estimates, in fiscal year 1981 constant dollars, were, for 64 aircraft:

	Billion
Program acquisition	$10.3
20-year operations and support	6.7
Total 20-year life cycle costs	17.0

Our evaluation also considered several airlift augmentation programs large enough to satisfy the recommendations of the 1981 Congressionally-Mandated Mobility Study. For large C-5 and C-17 programs of approximately equal capability, some cost results favored the C-17, because of its lower operating and support costs. (Had DOD elected to pursue a more ambitious airlift augmentation alternative, the choice between C-5's and C-17's may possibly have been different.) But the C-17 development costs dominate a smaller-scale program, so that the C-5 is preferred to reduce the airlift shortfall in the near term.

KC-10 MODIFICATION

General JONES. Senator, the Civil Reserve Air Fleet and the KC-10 can carry the same type of equipment and we intended to expand the Civil Reserve Air Fleet. But now to modify an airplane it would cost us about $25 million, to modify one commercial airplane. It is now more effective to go and buy a commercial airplane, the KC-10, modified for tanker and or cargo use than it is to go back with $25 million to modify aircraft that are already in the civil fleet. We are not doing it to help industry and production, but it does help with the KC-10 line.

Senator STEVENS. Some of us, and I am one of them, think we should be. We should be coordinating our military needs in advance with the advance needs of the civilian economy and try to get some economies of production with them. Particularly, to be able to use more off-the-shelf instead of having to retool and reengine. I was told, General, there was not going to be any reengining on the C-5.

KC-135 REENGINING

General JONES. We are reengining the KC-135s but we are not reengining the C-5s. It is the KC-135 we are reengining.

Senator STEVENS. We are going to have some additional questions.

Do you have something else, Mr. Secretary?

Secretary WEINBERGER. I was just going to add that the draft program requests for 1984, 1985 and 1986, in rough form as we have tried to work ourselves through this plan, indicate that they would be running substantially over past requests and showing a reliance on that program.

Also, the KC-10 is a DC-10 converted and meets some of the points you were making. We have a request in for them.

Senator STEVENS. That is good. Yes, I noticed that.

Senator, do you have anything further.

Senator Stennis. No. Thank you very much.

Senator STEVENS. Well, Mr. Secretary, this is going to be a tough year. I think you know that. It reminds me of that old cartoon that Fred Seaton had over his chair. It was a Skippy cartoon and that little boy was saying his prayers and saying to God, make me a good boy, and then he has a vision of that bully coming down, and he says but don't make me too good because you know what kind of a neighborhood this is. [Laughter.]

We are in an awful rough neighborhood this year and we are going to be calling on you for a lot of support. I must say there isn't anything in the budget that you have presented that isn't going to be subject to scrutiny by one of us as we try to see what we can do in this period of projected extremely high deficit. We will do our utmost to get you the money to run the Defense Department and maintain our readiness, but we are going to have some disagreements along the line.

SCRUTINY OF DEFENSE BUDGET

Secretary **Weinberger**. It should all be scrutinized very carefully, Senator. You have given enormous support, you and the committee, in previous years, as has Senator Stennis. We want it scrutinized. We think it is fully subject to that and we share with you the worry about the nature and size of this threat that we all face.

Senator **Stevens**. Assuming Senator Stennis agrees, we are going to have some specific issue hearings, like the problem of overclassification or at least the ability to get the information we need to justify the program.

Secretary **Weinberger**. We are with you on that.

Senator **Stevens**. We are going to have a specialized hearing on the C–5. we are also going to go to these target areas and try to let the Members of the Senate, who are interested listen to the people from your Department rather than having these general overviews that we have had in the past.

We have had your presentation here and then we will have the separate one from the services. After that we are going to specific issues that we will notify you and the people from the services in advance of what the subject matter is, but we look forward to a total examination of these critical items this year.

SUBMITTED QUESTIONS

The subcommittee has a series of questions which we will submit to you for response. They will be inserted in the record at this point.

Secretary **Weinberger**. Thank you.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

Defense Posture

QUESTION: Let's not forget your 1982 supplemental request. It is also large -- some $2.4 billion not even counting the pay supplemental which will approach $5 billion.

A big part of the program supplemental is going to have a heavy outlay impact on 1983 also. Generally, why do we have to have such a large program supplemental?

ANSWER: The program supplemental request, while appearing to be quite large, does not restore the buying power we lost due to higher than anticipated inflation in 1981. Considering the impact of the 1978, 1979, 1980 and 1981 programs spending in 1981, and therefore subject to the higher inflation rates, we calculated a loss of some $4 billion. $2.2 billion alone was against 1981 programs. Since we cannot retroactively add amounts to those years as budget supplementals, funds could only be made up in on-going FY 1982 appropriations. During the joint OSD/OMB budget review, it was determined that $2.3 billion could be requested and made available in FY 1982 as a supplemental.

QUESTION: We realize some of the program supplemental is for "must pay" items -- military pay and allowances, and the like. But why do we need to fund such things as new aircraft, more MX support, and M-1 tank components? Why can't these kinds of things wait for 1983?

ANSWER: The procurement dollars in our FY 1982 supplemental provide a unique opportunity for us to invest in a technological and production capacity that will enhance our military capabilities. The aircraft will be procured at very attractive contract prices and additional buys are programmed in FY 1983 through FY 1987.

The surge capability for the M-1 tank components allows us to "bank" these sets and consequently cut in half the lead time required for production of the tank. The plant capacity is available now and this acquisition initiative is another example of Deputy Secretary Carlucci's on-going program to manage the Defense programs more efficiently and effectively.

The Advanced Ballistic Reentry Vehicle (ABRV) is also another example of the technological capabilities available to us now. Full-scale development can be initiated in FY 1982 which will ensure the availability of the warhead to meet the IOC schedule for the MX.

Deferring these programs to FY 1983 can be costly, both in terms of dollars for technology and production and in our defense capabilities over the long-term.

Military Pay

QUESTION: Congress was generous with military pay raises last year, increasing enlisted pay by 10 to 17 percent and officers' pay more than 14 percent. And we understant that this increased pay has brought substantial improvements in both recruiting and retention. But now, in 1983, we are being asked for another 8 percent increase for the military while civilian pay is held to 5 percent. Given the difficult budget pressures we have been discussing, wouldn't it be reasonable to hold military pay to the rate of increase for Federal civilians?

ANSWER: In recent years the linkage between military and civilian pay raises has been severed in recognition of the inadequacy of military compensation and the perception by the military that they were second class citizens. The recent equitable pay raises have been an important factor in the substantial improvements in recruiting and retention. The military pay raise proposed for FY 1983 not only maintains the level of adequate compensation that has been established in recent years but recognizes the personal hardships members and their families tolerate in pursuit of a military career. We believe the corner has been turned on resolving problems with recruiting and retention. The gains made in recent years should not be jeopardized by a return to arbitrary pay caps.

Personnel Costs and the Draft

QUESTION: Currently 41¢ of every defense dollar is devoted to personnel costs, and that is far above our Soviet counterparts. Is this sufficient reason to consider the alternative of reviving the draft?

ANSWER: No. For FY 1983, approximately 46¢ of every defense dollar will be for active military, federal civilian, and reserve manpower costs. Around 20¢ is for active military personnel pays and allowances which could be affected by a draft. How this latter figure compares with Soviet conscription costs depends on how the costs of conscription are defined. For example, to meet our current military requirements with a draft would take a far smaller fraction of the youth population than did the draft of the 1950's or 1960's. Under most reasonable assumptions, such a draft would cost about $2 Billion more than the current All Volunteer Force (AVF). This increase assumes that competitive pay levels would be maintained for the draftees and others in the "first-term" of military service. To the extent that larger numbers were drafted to satisfy greater force levels, a smaller career force, or a national service program, the costs to return to a draft would be even greater. In addition we would be obliged to provide liberal education benefits comparable to those in the pre-1977 GI Bill for servicemen and women under a draft. Although some money would be saved by the elimination of enlistment bonuses and by significant reductions in recruiting, these and other savings would be overwhelmed by additional training and education costs, increased turnover, and a lower skill level. Only if Congress determined that first-term pay be drastically reduced, in the range of one-half to three-fourths of the Federal minimum wage, would a return to the draft "break-even" with current AVF costs. Accordingly, these costs are not a sufficient reason to consider the alternative of reviving the draft.

Personnel Costs and the Draft

QUESTION: Currently 41¢ of every defense dollar is devoted to personnel costs, and that is far above our Soviet counterparts. Is this sufficient reason to consider the alternative of reviving the draft? The Congressional Budget Office estimates a return to conscription would save $1.1 billion in all-volunteer force pay benefits in 1983 alone. What is your judgment in this area?

ANSWER: No. For FY 1983, approximately 46¢ of every defense dollar will be for active military, federal civilian, and reserve manpower costs. Around 20¢ is for active military personnel pays and allowances which could be affected by a draft. How this latter figure compares with Soviet conscription costs depends on how the costs of conscription are defined. For example, to meet our current military requirements with a draft would take a far smaller fraction of the youth population than did the draft of the 1950's or 1960's. Under most reasonable assumptions, such a draft would cost about $2 billion more than the current All Volunteer Force (AVF). This increase assumes that competitive pay levels would be maintained for the draftees and others in the "first-term" of military service. To the extent that larger numbers were drafted to satisfy greater force levels, a smaller career force, or a national service program, the costs to return to a draft would be even greater. In addition we would be obliged to provide liberal education benefits comparable to those in the pre-1977 GI Bill for servicemen and women under a draft. Although some money would be saved by the elimination of enlistment bonuses and by significant reductions in recruiting, these and other savings would be overwhelmed by additional training and education costs, increased turnover, and a lower skill level. Only if Congress determined that first-term pay be drastically reduced, in the range of one-half to three-fourths of the Federal minimum wage, would a return to the draft "break-even" with current AVF costs. Accordingly, these costs are not a sufficient reason to consider the alternative of reviving the draft. The Congressional Budget Office estimate of a $1.1 billion savings includes cuts in first-term pay, and assumes no education benefits comparable to the pre-1977 GI Bill for a return to conscription. As reflected above, a reasonable judgment is that education benefits--comparable to those in the pre-1977 GI Bill--and competitive pay levels for "first-termers" would be appropriate for servicemen and women under a draft. Accordingly, a draft would cost about $2 billion more than the current All Volunteer Force (AVF).

Force Growth

QUESTION: Let's look at personnel in another way. The 1983 budget proposes increasing active military strength by 50,000 to meet planned force expansion. There are some who will argue that the Department ought to concentrate its resources on solving current personnel problems such as mid-career and special skill retention and worry about more force expansion later. What is your observation?

ANSWER: We would like to point out that only modest force structure growth is planned in the FY83 program -- scarcely 1.0% over FY82. In addition, it is in part through force growth that the solution to our current personnel problem lies. Let me elaborate.

Current personnel problems and force expansion are not mutually exclusive concerns; they must be addressed in concert. Mid-career and special skill retention are problems that all of the Services are addressing, using the various tools of the personnel management system to include selective bonuses. Our emphasis is on fixing those problems that will give us higher current readiness. But at the same time, we have to be concerned about the readiness of our future forces. We cannot accommodate force expansion in the future without planning for it now. It takes time to grow the career force to the levels that we will require for the remainder of the decade. The careerists of the late 1980's must be recruited and retained now.

A gradual ramp toward higher force levels will enable us to grow the careerists in the special skills that will give us a ready future force.

In summary, we cannot use a two-stage process--dealing only with current personnel problems now and force expansion later; the processes of solving current personnel problems and expanding the force must go on together. These processes are being conducted in all the Services to varying degrees. (Army is an exception, showing a slight decline in force structure from FY 82 to FY83 in order that its force modernization program may be fully funded.)

Quality of Military Personnel

QUESTION: There is public concern over the quality of our military personnel when we have newspaper columnists reporting 9 of 16 active Army divisions are rated unfit for combat; two-thirds of the Navy's operational air squadrons aren't combat ready; and the Air Force cannot conduct a brigade-sized airdrop overseas. I'm sure you're familiar with these charges and others. How do you answer them?

ANSWER: The question attempts to link the quality of military personnel with an alleged degradation in unit readiness. It should first be clarified that unit personnel readiness is not reported in terms of quality but rather in terms of manning level by grade and skill area. A shortage in qualified and experienced personnel that adversely affects a unit's capability to perform its assigned missions will be reflected in a lower readiness status.

The statistics in question were drawn from a Washington Post article by Jack Anderson which grossly overstated unit readiness degradation. (Deleted.)

Quality of personnel in the military is measured in terms of educational level and entrance test scores. Recent studies do not support the allegation that the military Services suffer from gross quality problems. The educational level of the active force compares favorably with the civilian labor force with a significantly higher proportion of high school diploma graduates (69 percent versus 36 percent) and a slightly lower proportion of college graduates (14 percent versus 16 percent). In addition, the fiscal year 1981 Armed Forces Qualification Test scores compared favorably with calendar year 1980 civilian youth statistics (55 percent of military and 53 percent of civilians scored as above average).

Operation and Maintenance

QUESTION: Another aspect of readiness is Operations and Maintenance, and we are told we should not cut in this area because it will undermine the initiatives of last year. On the other hand, we see an increase of more than $8 billion for the O&M accounts. What would be the impact if we held O&M to current program levels which were themselves sharply increased over the past two years?

ANSWER: The FY 1983 Operation and Maintenance estimate of $70.4 billion is an increase of $7.4 billion over the revised FY 1982 level. $3.3 billion of the increase relates to the impact of civilian pay raises, fuel price changes, changes in the cost of procuring material from DoD stock funds, changes in the cost of Services provided by DoD industrial funds, as well as changes in the cost of purchases on the economy. The program growth of $4.1 billion provides an increase that supports force level changes as well as a more modern and sophisticated force.

If the FY 1983 program were held to the current levels, major program initiatives such as reducing the backlog of depot maintenance to zero by the end of FY 1983 can not be achieved. Also, proposed increases in the tempo of training for our forces would not be accomplished. The increased level of flying hours programed in FY 1983 could not be accomplished which would result in fewer hours per month for our pilots and less experience in flying our newly procured aircraft. In sum, the impact of maintaining the current level of funding into FY 1983 would result in reduced readiness and sustainability for our operating forces.

Prepositioned Materiel

QUESTION: Just last December the Congress approved a 1982 Defense Appropriation bill that specifically excluded shipments for prepositioned materiel configured in unit sets (POMCUS) in Europe in excess of four division sets. The supplemental budget request now proposes to delete that prohibition and fund the transfer of two divisions set as originally proposed in the 1982 budget. Is it realistic, do you think, to expect Congress to reverse itself in a supplemental funding bill?

ANSWER: The Congress, as a whole, has never really had an opportunity to examine in detail the POMCUS issue. As part of NATO's Long Term Defense Program, the U.S. has agreed to contribute additional D-day reinforcements for a conventional defense of NATO's Central Region. Concommitantly, our allies agreed to land acquisition and construction of storage sites for two additional U.S. POMCUS division sets. Construction of warehouse facilities at each site is now underway. It is hoped that during the FY 1982 supplemental hearings this issue will be examined. We believe, if the issues are reviewed, the Congress will authorize expansion of POMCUS beyond the current four division sets.

Possible R&D Budget Reductions

QUESTION: Continuing our exploration of possible budget reductions, why can't we pare down the $4.4 billion increase (22 percent) in Research and Development funding? Critics will tell us that even half of that proposed increase would be substantial.

ANSWER: Of the $4.2 billion total increase in R&D from FY 1982 to FY 1983, $1.2 billion accounts for inflation. The addition of that amount merely allows us to conduct R&D at the FY 1982 level. The $3.0 billion in real growth is focused on three areas: (1) the President's strategic initiatives $+2.0 billion; (2) our technology base program $+0.6 billion; and (3) classified programs $+0.4 billion. All of our conventional warfare programs, our C^3 efforts, and our defensewide support areas are held to the FY 1982 levels.

Unless we cut back on the B-1B, M-X, TRIDENT II, BMD technology, and strategic communications programs, all of which are at the heart of the President's strategic initiatives, we could only reduce R&D by providing no real growth in our technology area and reducing the other mission areas below FY 1982. Therefore, although the general statement that "even half of the proposed increase would be substantial" would appear to be rational, the specific areas of increase belie that approach since it would not, in our view, be prudent to move further behind our adversary's efforts in the strategic and technology areas of R&D.

QUESTION: In Procurement, as in Research and Development, we realize the outlay savings are low. But the proposed investment in the 1983 budget is exceedingly high as we discussed earlier. The budget cutters say we need to restrain procurement investments now to save high outlays down the road. What is your response to that position?

ANSWER: At most, 16 percent of FY 1983 TOA for a procurement account will expend during the first year. So yes, as prior year procurement programs drive FY 1983 procurement outlays, FY 1983 procurement programs will contribute to outlays down the road.

However, stretch out of our investment in weapon systems is counterproductive. The Carter Administration made do with less than economical production rates to live through periods when our apparent policy was to give national defense a back seat. Now, we see the consequences of such action. What we need to do is gain agreement as to a rate of investment. That rate of investment should allow us to adequately meet the challenge of the next decades. Turning the valve on weapon systems investment for short-term outlay benefit will not result in adequate national defense for the long term.

FY83 SCN

QUESTION: Everybody, of course, is looking wide-eyed at the Navy shipbuilding budget which includes two new nuclear carriers, two new Trident submarines, three new cruisers, two new attack submarines, two new frigates, and several other vessels. We are aware of the 600-ship Navy goal, and we are aware of the benefits of up-front funding and economical production rates. But a shipbuilding budget of this size raises two major questions:

First, is it wise both fiscally and militarily to make such a large commitment in one budget year?

ANSWER: The five year shipbuilding plan submitted with this year's budget represents the major first step in restoring maritime superiority. It has been formulated with a view towards the maximum improvement in total warfighting capability achievable within the constraints of overall fiscal limits, competing requirements, shipbuilding capacity, and production efficiency and stability. The FY83 request, ambitious in comparison with the inadequate requests of recent years, is not disproportionate to the total plan either in quantity or in cost.

The 18 new construction ships requested in FY83 represent well less than one-fifth of the total five-year request. SCN in FY83 is roughly 20% of the five year estimate and outlays are stable across the five years. In fact, more than 50% of the 133 ships are requested in the last two years of the plan.

Of the ships requested in the 15 five year plans completed since FY62, fewer than half have been authorized. This track record alone argues strongly against further "bow-waving" of shipbuilding requests into the out-years.

Militarily, the quantity and mix of ships in this request will contribute directly to achieving the force level objectives we judge necessary to restore maritime superiority. The deterrent value of the national resolve signaled by actions such as authorization of two CVNs in one budget year should not be overlooked. If the ships requested are authorized in FY83, however, nearly half of them will enter the fleet after 1987. Stretching out these procurements would delay accomplishment of our objectives well into the next decade.

In short, the FY83 SCN request is in balance with the remainder of the five year shipbuilding plan. To delay commitment to building the ships requested is to delay, and perhaps forego, the opportunity to restore the maritime superiority necessary for our national strategy.

SHIPYARD CAPACITY

QUESTION: Secondly, do we have the industrial capacity to handle this kind of new ship construction along with all the battleship reactivations, merchant ship and conversion, and overhaul and repair schedules?

ANSWER: The shipbuilding industry and its supporting industry do have the capacity to handle the planned Navy Five Year Shipbuilding Program and the planned overhaul and repair work. The Navy and commercial new construction work is projected to utilize an average of 70% of the available building positions over the next six years. The private sector employment required during this period for the total Navy new construction, repair and overhaul programs and the projected commercial work will be slightly below or near the current shipbuilding industry employment level.

QUESTION: A principal argument for battleship reactivation was the need for a surface action group around the battleships to augment the carrier battle groups. Navy estimated $2.8 billion to procure a nominal surface action group versus $11.4 billion for a carrier battle group. The annual operating cost for a carrier group was estimated to be over twice that of a battleship group.

With the two battleship reactivations underway, why is the two carrier construction program being pursued at this time?

ANSWER: This program will expedite the increase toward our 15 carrier battle group goal, and will allow the earliest employment of approximately 180 additional highly-capable, tactical aircraft at sea.

Aside from this important aspect of nearly two years earlier delivery of CVN-72 and CVN-73 when compared to traditional strategies, this request will save approximately three quarters of a billion dollars in SCN funds. This strategy not only reflects the full-funding policy expressed by the Congress, but it also goes a long way in strengthening vendor and contractor industrial bases.

As for the battleship reactivation, the fundamental reason for bringing them back and modernizing them is the near-term, measurable increase of combat power in the strike and anti-surface warfare roles. The battleships will be employed to augment the carriers, not replace them.

QUESTION: Force modernization costs have burgeoned from $27 million in support of 29 systems in FY 1980 to over $950 million for 119 systems in FY 1982. Preliminary estimates indicate that over $2.6 billion will be required by 1986 to support new weapon systems.

It seems that procurement decisions are being made with little regard to the logistics support requirements. It also appears the Army is the only military service which is trying to come to grips with the scope of this problem. What are we doing to foresee and control Operation and Maintenance support requirements during the development and procurement cycles?

ANSWER: Force modernization "costs" cited in the question appear to represent estimates of O&M or support costs for new systems only. Such numbers do not necessarily reflect the real growth of force modernization programs, nor the impact of such growth on total O&M or logistic support funding. From FY 1980 through FY 1982 total O&M funding increased by $8.2 billion or 11.4 percent in constant FY 1983 dollars. A further O&M increase of $4.2 billion or 6.2 percent is requested for FY 1983. These increases are believed sufficient to support all new systems being fielded in these years as well as to provide for enhanced readiness and more adequate support for all systems.

In addition, life cycle support requirements are an inherent part of the acquisition process in all the military departments and in OSD. The acquisition procedures of DoD Instruction 5000.2 require an explicit review at each development and production milestone of readiness objectives, logistic support requirements and associated operating and support funding. The DoD Acquisition Improvement Program includes a number of initiatives that will further strengthen the emphasis on foreseeing and controlling support requirements and maintaining visibility of weapon system support funding.

READINESS

QUESTION: Although your statement stresses readiness and sustainability, the budget request reflects a much greater emphasis on procurement and development initiatives. What confidence do you have that the accelerated investment program will not create serious and costly support requirements?

ANSWER: Our budget fully funds all readiness requirements that had been identified and validated. Our procurement and R&D accounts are larger in absolute terms, but we put first emphasis into making sure we provided adequate money for such readiness items as depot maintenance, spares procurement, and operating tempo.

As part of our streamlining and revision of the systems acquisition process, we have instituted increased emphasis on assuring that support costs are considered fully and that every effort is made to minimize these costs during system development and production. Our outyear programming Operation and Maintenance funding for new systems as they come into the inventory is based on costs estimated in the acquisition process. While we are attempting to improve the accuracy of these estimates for the future, estimating such cost is extremely difficult and is subject to the numerous uncertainties attendent in the development of new weapon systems. As systems mature, we reassess support requirements and change our programming accordingly.

QUESTION:
Expensive initiatives are proposed in this budget for the Rapid Deployment Force to expand its headquarters, commit to long term prepositioned ship leasing, and accelerate training. Meanwhile, the RDF scope seems to have been pared from a global to a Southwest Asia task force. Are we duplicating the charter of the Marine Corps and US Readiness Command?

ANSWER:
No, we are not duplicating missions. Rather than duplicating Marine Corps missions, the RDJTF incorporates those capabilities unique to the Marine Corps and builds upon them. The RDJTF must plan to confront a number of likely scenarios, ranging from a Soviet invasion of Iran to an inter-regional crisis in SWA involving countries and forces supported by but not directly involving the Soviet Union. Some of these scenarios include potential actions well inland. The potential size and nature of the enemy threat may well exceed the capability of a single Service. While each Service has its own unique capabilities, the key to the effectiveness of the RDJTF is the flexibility provided by combined arms, wherein force size and capabilities are tailored to meet the specific threat. Prudent military planning dictates that the RDJTF utilize the full range of capabilities offered by all the Services.

As for US Readiness Command, it is tasked with, among other missions, maintaining a capability to reinforce/augment other unified/specified commands to deploy forces as designated by the Joint Chiefs of Staff, and to be prepared to provide forces and a Separate Joint Task Force for contingency planning and operations, disaster relief, and non-combatant evacuation operations for all areas not assigned to another unified command. This tasking is in addition to other principal missions, such as the planning for land defense and the planning and execution of military support planning for the defense of Alaska.

Interim M-X Deployment

QUESTION: When do you now expect to make the interim M-X deployment decision?

ANSWER: The President announced his decision on 2 October 1981 to deploy the first 40 M-X missiles in existing silos, as the interim basing plan. Our written directive in late December specified existing Minuteman silos, and the particular wing selection is still pending. In summary, the decision has been made and we are working toward an IOC of late 1986.

Description of Long-Term Basing for M-X

QUESTION: Can you expand on the M-X basing comments in your prepared statement? Exactly what options are you seriously considering, and what, if any, have been eliminated at this point?

ANSWER: The President announced on 2 October 1981 that, as an interim measure, we would deploy the first 40 M-X missiles in existing silos with an IOC in 1986. Implementation of that decision is well underway, and we have selected Minuteman silos for that deployment. We hope to be able to announce soon the decision on which Minuteman base will host these missiles. The missile program is continuing very successfully, with the first R&D flight test scheduled at Vandenberg AFB in early 1983. As you know, the President also directed that we initiate vigorous R&D programs on three long-term basing options: deep basing, in which missiles are based a few thousand feet in the earth to ensure survivability; continuous patrol aircraft, in which the missiles can be launched from long-endurance airplanes in flight; and ballistic missile defense, to include suboptions of deceptive basing and superhardening. The status of these is as follows. Concerning deep basing, all relevant work done in the past is being studied, and various concepts are being created and evaluated. Additionally, the Air Force and the Defense Nuclear Agency are investigating the possibility of performing a test in Nevada using a hardened tunnel with a high explosive simulation of a nuclear surface burst, both for top loading and for side loading in mesa-like terrain. Because of the Congressional prohibition in the Authorization Conference Report, we are doing no R&D work on the continuous patrol aircraft option. Our plan is to first perform a survivability analysis at the conceptual level, using in-house and Defense Science Board resources. Assuming positive results, we would then seek congressional authority to proceed with an R&D program. Deceptive basing is being considered as part of the ballistic missile defense option. The Army and Air Force are working separately and together to define various ways to defend various types of deceptive basing, and all of this activity is closely coordinated by the subpanel of our Strategic Forces Executive Committee.

Overall, we are working to develop sufficient technical understanding of the three options to enable a rational decision by 1 July 1983. At this early point, there is no clear winner or loser emerging.

Long-Term Basing Decision Confidence

QUESTION: Considering our limited experience with air launched ICBM's and the absence of any technology demonstration for deep underground basing, can you confidently make any long-term deployment decisions on these basing modes?

ANSWER: No, we are not able at this time to make a high-confidence decision on long-term basing for M-X. That is why the President directed that we carry out vigorous R&D programs in the three most promising areas. Those programs are designed to maximize the relevant, useful information available in time to reach a high-confidence Administration position prior to submitting a recommendation to the Congress by 1 July 1983.

Ballistic Missile Defense

QUESTION: With a statutory decision deadline of July 1983, will you have sufficient time to consider the deployment of a ballistic missile defense for the MX?

ANSWER: Yes. A program to resolve the major technical issues associated with BMD of fixed silo-based or deceptively-based ICBMs has been initiated. The program has been structured to support an MX basing decision by 1 July 1983 and to verify that new BMD concepts and technologies can provide sufficient effectiveness to be utilized as a major element in MX basing.

QUESTION: Do you think we can put together an effective ballistic missile defense system for MX within the limitations of the 1972 Arms Limitation Treaty?

ANSWER: The ABM Treaty places very few limitations on R&D for ballistic missile defense (BMD). Therefore, without change to the ABM Treaty we can conduct the R&D program necessary to maintain and update our BMD technology to assure that: (1) persistant Soviet efforts do not erode the lead that we had when the ABM Treaty was signed and (2) to provide the option to develop and deploy a defense rapidly if needed.

We are considering BMD as one option for a long-term survivable basing mode for the MX missile. A program has to be structured to develop the information needed on the technical feasibility, arms control implications, siting and costs to support the 1983 MX basing decision. Such a system could not be deployed within the Treaty limits; however, if we should choose to deploy a BMD system with more than 100 interceptors we have the option of modifying the Treaty rather than withdrawing from it. If we are unable to negotiate an acceptable modification and feel that the deployment of BMD is in the overall best interest of the nation, then withdrawal on six months notice is an option provided in the Treaty.

Chemical Warfare

QUESTION: The President certified to Congress this month that production of chemical munitions is essential to the national security. We understand there is some $700 million in the 1983 budget for chemical munitions. What is the 1983 program and what are the overall goals in this area?

ANSWER: There is not $700 million in the FY 1983 budget for chemical munitions. There is $705 million for all chemical purposes. Of that amount, $508 million is for development and acquisition of chemical protective systems, and $74 million is for the disposal of obsolete chemical munitions. The remaining $123 million is for retaliatory programs including $19 million for maintenance of the existing stockpile, $32 million for research and development, $42 million for constructing and equiping binary production facilities, and $30 million for munitions procurement.

Our ultimate goal in the chemical warfare area is to eliminate the threat by achieving a complete, verifiable ban on chemical weapons. Since the Soviets have been unresponsive in this respect, we must have the capability to deter chemical use. Deterrence requires both the capability to survive and operate in a contaminated environment and the ability to force the initiator of chemical warfare to also operate in such an environment. The retaliatory component is required because operating encumbered by protective equipment and procedures is so debilitating that the user of chemical weapons would gain a decisive advantage if he could operate unencumbered.

QUESTION: There is growing and determined opposition to the development and production of any chemical weapons, Mr. Secretary. The President and the Pentagon, however, obviously give this high priority. How do you answer the critics who charge that any production program is unnecessary and dangerous?

ANSWER: I would like to respond by entering the following unclassified statement into the record. The Administration's ultimate goal in the area of Chemical Warfare (CW) is a complete and verifiable ban on the development, production, and stockpiling of chemical weapons. Until such a ban can be obtained, our objective, consistent with existing treaties and international law, is to deter the use of chemical weapons. The US will not use chemical weapons unless chemical weapons are first used against us or our allies. The US does not and will not possess biological or toxin weapons.

Soviet military doctrine envisages the use of chemical weapons and acknowledges their value, particularly when used in massive quantities and in surprise attacks.

Of more significance, the Soviet Union and its allies are well prepared to wage chemical warfare and to fight in a chemically contaminated environment. The USSR possesses a wide variety of lethal and incapacitating chemical agents and the means to deliver them. They have a busy and expanding chemical proving ground and a large, well trained chemical organization, with over 60,000 troops, whose status within the Soviet military hierarchy was enhanced during the 1970s. They have invested heavily in individual and collective protection and decontamination equipment, and they train with actual chemical agents.

In addition to extensive Soviet chemical warfare programs, a major accident in Sverdlovsk and evidence in Southeast Asia indicate that the Soviet Union's arsenal also includes toxic substances specifically prohibited by the Biological and Toxin Weapons Convention.

In contrast with the Soviet Union during most of the 1970s, the US allowed its retaliatory capability to decline, did little to improve defense against chemicals and neglected relevant defense doctrine and training. In addition, the United States in 1969 stopped the production of lethal or incapacitating chemical agents and the filling of new munitions with chemical agents. At the same time, the US renounced the use of biological and toxin weapons, destroyed all stocks of these weapons and converted its biological warfare facilities to peaceful purposes.

While unilaterally restraining our capabilities, the US made major efforts, in the late 1970s, to eliminate the chemical warfare threat by attempting to reach agreement with the Soviet Union on a comprehensive and verifiable ban on chemical weapons. Verification of such a ban is a complex and difficult problem. These efforts stalemated due principally to fundamental disagreement on the tough issue of the need for effective verification of a CW ban and particularly Soviet intransigence on questions relating to on-site inspections. Negotiations were further complicated by our weakness in this area compared to the Soviets, who possessed a decisive military advantage and had little arms control incentive in the face of the large asymmetry in chemical warfare capabilities. The Soviets did, however, have an interest in negotiations as long as it impeded improvement of US deterrent capabilities.

In view of the overall military balance between US and the Soviets, we cannot rely on other components of our military capabilities to deter chemical warfare. Consequently, to deter, we find we need to improve our CW capabilities sufficiently to deny the Soviets the significant military advantage they would gain from using chemical weapons. Improving our defenses against chemical weapons is a necessary, but not sufficient, step to deny the Soviets such an advantage.

Improved defenses can save lives, reduce casualties and reduce--but not eliminate--significant degradation of military performance in a chemically contaminated environment. The needed protective equipment reduces mobility, slows operations and makes many tasks difficult or impossible. Reliance solely on improved defenses would leave the initiators of chemical warfare largely free to operate without the constraints imposed by protection; thus yielding them a major advantage and encouraging the use of chemical weapons.

Therefore, in addition to improving our defenses we must maintain a capability to retaliate with chemical weapons, to reduce the incentive to the enemy's first use, since he would also have to operate with the encumbrance of protective equipment. However, our current chemical weapon stockpile (which will ultimately be destroyed) is inadequate to provide an effective deterrent. Most of the current stockpile is not usable because it is stored in bulk containers. Much of the remainder is in ammunition for weapons that have been or will be phased out of service. The current stockpile is also lacking in weapons that can be used against the rear echelons of attacking forces. Finally, the current stockpile presents logistical problems, due to the elaborate safety precautions required in transport, which further restrict its utility.

In 1980, both the Defense Science Board and a senior interagency review group found serious deficiencies in the US CW posture and recommended an improvement program consisting of both the protective and retaliatory elements of deterrence. They made no recommendations on overseas weapons deployment.

It is the objective of the US chemical warfare program to improve defensive and retaliatory capabilities to deter CW attack and to provide incentive and gain leverage in arms control negotiations.

Recent US Government program requests include the following:

-- The Carter Administration's CW programs increased from $111 million in FY 1978 to $239 million in FY 1981, to improve defenses against chemical warfare.

-- In 1981 the new Administration's FY 1981 Defense Supplemental request included $20 million to purchase and install the equipment required to complete the binary production facility authorized and appropriated by the previous Congress.

-- The FY 1982 Budget request included $532 million for chemical warfare programs, primarily for defense, but no funds for the production of weapons.

The FY 1983 request for the chemical program is $705 million, with over 70 percent for defense and 10 percent for disposal of obsolete chemical weapons. The remainder supports the retaliatory element of the deterrence program and includes $30 million for procurement of binary chemical munitions: the 155mm binary artillery projectile, and the Bigeye aerial chemical bomb.

The defensive element of the FY 1983 program ($508 million) will improve the quality and quantity of all aspects of chemical defense: training, individual and collective protection, detection and warning, decontamination and medical.

The objective for the retaliatory element of the program ($123 million in FY 1983 including the funds for production) is to maintain the safest, smallest chemical munitions stockpile that provides the ability to deny a significant military advantage to any initiator of chemical warfare. We need not, and will not, plan to match the Soviets in agent/munition quantities and types.

The US will continue to exercise responsible restraint in this area and will make only those improvements necessary to ensure that the US has a credible and effective deterrent/retaliatory capability.

The binary munitions being developed by the US contains two non-lethal substances which form the standard nerve gas only when mixed. The considerable safety, security, and logistical advantages that binary weapons offer during the entire life cycle from manufacturing through storage and transportation, to eventual disposal, make binaries the logical choice over unitary munitions for stockpile modernization. Transportation advantages make a strategy of centralized storage and crisis deployment more workable, and there is considerable flexibility in storage and control of the binary components.

The Allies recognize the chemical threat and are committed by the NATO Long Term Defense Plan to improve their chemical defenses. Our NATO Allies have been informed of our intent to improve the US retaliatory capability. This US decision involves development and production only. No decisions or recommendations have been made regarding deployment of chemical weapons. Should it ever be determined that overseas deployment is desirable, there will be full consultation with the nations involved prior to making any decisions.

The ultimate goal of US policy is to eliminate the threat of chemical warfare by achieving a complete and verifiable ban on chemical weapons. Our program supports this goal by improving our military posture sufficiently so that the Soviets will perceive they have nothing to gain from such warfare.

It is worth noting that since the end of World War I, all use of toxic chemical weapons has been against unprotected military forces and civilians who could not protect themselves and who had no ability to retaliate. Even in the intense European conflict of World War II following D-Day, Hitler did not use his chemical arsenal. He believed the Allies stood ready to retaliate.

The thrust of all our efforts in this area is to deter the use of chemical weapons, and to give incentive to the Soviet Union to join us in our objective of seeking a complete and verifiable ban on the development, production, and stockpiling of such weapons. If we are successful in achieving this ban, we will be able and eager to terminate the chemical weapons program at any time.

QUESTION: Our strategic Command, Communications and Control deficiencies are well documented, Mr. Secretary, and you have assigned a high priority to upgrading our C^3 capabilities within the President's strategic package. How does this budget answer that priority, and what are the specific goals for establishing a survivable and enduring system?

ANSWER: The FY 1983 budget request gives a very high priority to President Reagan's decision to modernize the strategic C^3 system. The programs emphasize improved survivability and endurance of all the essential elements of the system -- the warning sensors and associated information processing capabilities, means for dissemination and evaluation of warning data, command centers and communications for response solution, and links for transmission of orders to the forces. The programs include initiatives to improve our capability to manage the forces during the period following the initial attack. Our specific goals are to achieve balance of survivability and endurance of the strategic C^3 system, both within the system itself and with the forces it supports, and to achieve the full capability to implement our policy for deterrence of nuclear war.

QUESTIONS SUBMITTED BY SENATOR RUDMAN

QUESTION: Does this observation, viewed against the backdrop of the Reagan Administration's ambitious strategic force modernization program as reflected in the FY 1983 budget request, accurately depict the state of the superpower balance three years later?

ANSWER: Yes. Since 1979, the Soviets have continued modernization of their strategic offensive and defensive capabilities that had been taking place over the last two decades. This, coupled with our failure to keep pace, has resulted in the loss of US strategic nuclear superiority and increased uncertainty to deter or control lower levels of conflict by the threat of nuclear escalation. President Reagan's strategic modernization program will provide some additional capability prior to 1986. However, only a sustained commitment to the President's program will help correct the existing asymmetries in the strategic balance in the long term and produce a more stable and secure deterrent.

QUESTION: Assuming this is the case, is the emphasis placed upon the "countervailing" nature of our strategic forces more an expression of wishful thinking than actual capability?

ANSWER: We do have a substantial capability but we do not have the full flexibility in our forces and C3I structure to respond as we'd like to any level of aggression. We do have options between no military response and an all-out nuclear exchange; but we'll have better, more fully developed options over the next several years as the President's strategic modernization program comes to fruition.

Question: Given the indeterminacy surrounding the final MX basing mode, slippages in the deployment schedules of other key strategic programs, and the growth and dispersal of the Soviet target base, do we have, or can we acquire before 1990, the systems required to execute the range of options understood by the "countervailing force" doctrine?

Answer: A timely deployment decision on a survivable and enduring basing mode for MX and on-schedule deployment of other key strategic programs is essential if we are to provide the President the desired flexibility to respond appropriately to any level of conflict. Should further deferral of a final MX basing mode occur, or should other key strategic programs--particularly nuclear forces and supporting command, control, communications and intelligence systems--continue to slip, our ability to acquire the desired flexibility in light of the Soviet buildup is in jeopardy.

40 MX MISSILES IN EXISTING MINUTEMAN III SILOS

Question: Some confusion apparently exists as to whether the Pentagon has indeed decided to emplace the first 40 M-X missiles in existing Minuteman III silos. What, in fact, are present plans for initial MX deployment?

Answer: On 30 December 1981, the Secretary of Defense directed that at least 40 M-X missiles be placed in existing Minuteman silos for the near-term deployment. There are 1000 Minuteman silos and the Air Force has been working hard to evaluate those silos against operational and technical criteria to determine which silos are suitable for M-X deployment. That process is still in progress.

QUESTION: The spatial distribution of Minuteman III silos would seem to be optimal for incorporation of Ballistic Missile Defense (BMD) System. What is the present status of BMD development, and how feasible is the concept of "layered" defense in the absence of a mobile basing scheme for the M-X?

ANSWER: BMD is one of three alternatives under consideration for insuring greater ICBM survivability. The BMD concept involves interceptor missiles (deleted) designed to allow the greatest possible flexibility for implementing the range of options for ICBM deployment. (Deleted.)

The current BMD program envisions layered defense as the follow-on growth option to the advanced low altitude terminal defense system. Layered defense should provide a much greater capability for defeating the threat posed by high numbers of incoming reentry vehicles.

QUESTION: A principal component of the Long-Range Theater Nuclear Force Modernization Program, the Pershing II IRBM, has experienced a staggering 110% cost growth since Pentagon testimony about the system in mid-September and since the Army's last formal report to Congress about the program's cost on September 30, 1981. (Production costs of the 108 Pershing IIs have increased from (deleted) to over (deleted). What accounts for the cost explosion?

ANSWER: The cost growth is based on the PERSHING II prime contractor's first year production proposal as modified by the Army's best estimate of a fair final negotiated cost. The primary causes of the cost growth are an underestimation of the manufacturing complexity of the system and inflation.

Specific causes of cost growth are:

(1) Inflation. The PERSHING Project Office has conducted a study of actual inflation versus OMB guidance which indicates that the OMB guidance is significantly lower than what is actually being experienced. For example, the approved indices for the period FY 79-81 allow for an approximate 9 per cent annual inflation rate while the program has experienced an actual 11 to 12 per cent annual rate during this period.

(2) Manufacturing Complexity. The original cost estimate prepared in 1978 was driven by a short notice directive to more than double the range of the system. The Government and the contractor were overly optimistic that the extended range system would be a fairly simple PERSHING II variant. As the design of the system has matured, the manufacturing process has become more complex. For example, since March 1981, the number of parts in the missile has increased almost 15 per cent.

(3) Extension of the Procurement Schedule. To accommodate the cost growth, the production program has been stretched one year. Funding levels for FY 83 and FY 84 have been increased, but not to the degree that the originally programmed production rate can be maintained. Therefore, an additional year of production has been planned, causing an increase in the program acquisition cost.

(4) Government Inflation Indices. The application of the Jan 82 OMB inflation indices produced cost increase.

(5) Engineering Changes. Several engineering changes have occurred since March 81. The most significant of these is the design of the thrust reversal system. The original concept of cutting through the kevlar motor case with explosive charges proved to be ineffective. A more expensive process using precut thrust reversal ports is being used, increasing the missile cost by about $100,000 thousand each.

(6) Cost Accounting Standards. The manner in which contractor overhead rates are computed have changed, causing a cost increase to the overall Government costs. It is offset by decreases in the overhead rates which the contractor is charging other programs.

In summary, 26 per cent of the cost growth is inflation difference, 26 per cent is manufacturing complexity, 21 per cent is production program extension, 14.2 per cent is OMB inflation indices, 7.2 per cent is engineering changes and 5.5 per cent is cost accounting standards.

QUESTION: The Pershing II's development, tests and production represent a highly concurrent schedule. The first two flight tests of a "full-up" missile will not take place until April of this year, and the first flight test over a land target will not occur until July, just 17 months before European deployment is scheduled to commence. Can we be confident that, given this constricted test schedule, we will be fielding a missile with the capabilities required to counter the Soviet threat?

ANSWER: Yes, the Army's approach, while not risk free, is prudent. The circumstances mentioned are a result of the concurrency which the program has been structured to accommodate. For example, the advanced development program verified the soundness of the area correlative technique by captive flight tests and actual missile flights. The Engineering Development program is expanding this data base with significantly more captive flights before the production decision. On the other hand, the extended range capability was not demonstrated during the Advanced Development program. Therefore, the maximum range firings, which require an overwater range, are the highest risk tests. By doing them first, we can either have the maximum time to solve any problems which arise or have the earliest possible signal that an unsolvable technical problem has arisen which requires cancellation of the program. Testing of the RSGF has already begun and results show the hardware is capable of producing reference scenes of proper quality. Soldiers are now being trained to operate this equipment and they will produce the scene which will be flown against the target area in captive flight tests and the early missile flights. Operational testing of a full set of equipment has been moved forward to as early a point in time as possible and will begin in July 1982. The ECM capability of the system was thoroughly tested during Advanced Development captive flight tests and will also be checked again in Engineering Development prior to the production decision. These results will be verified by later missile firings. The remaining tests listed will not be completed, but they have been structured to examine the critical elements at the beginning of the test. In all cases, these critical results will be available prior to the production decision.

To further reduce production risk, we are keeping the production rate of the missiles low until the completion of testing. This will minimize the impact of any engineering changes which might have to be made as a result of testing.

QUESTIONS SUBMITTED BY SENATOR ANDREWS

QUESTION: Retired Lt. General Vogt was quoted recently (Washington Post, Feb 25, 1982) to the effect that field commanders were not being listened to in deciding on new military hardware acquisition. Is the system, as Vogt states, organized in such a way that R&D specialists in the Pentagon are able to dominate the weapons procurement process, while field commanders have "very little say," to quote Vogt? Can this explain, at least partially, why so many of our weapons systems are excessively complex and unreliable? Is DoD giving adequate consideration to requirements expressed by field commanders and are the "theoretical weapons practitioners" in the Pentagon being exposed to the real world of the field?

ANSWER: Consideration is given to requirements expressed by field commanders in the military hardware acquisition process from the very beginning and throughout the process. The Services' operational requirements are developed by representatives of the field commands or users of the Services in close coordination with appropriate field commanders and Service schools. The Services' MENS are then staffed with each of the Services and the Joint Chiefs of Staff.

Services assign program managers (PMs) who manage the system acquisition process beginning with reconciliation of the mission needs and extending to introduction of the system into operational use. The PM works closely with civilian contractors in translating the operational requirements into contractual specifications. During the various phases of systems acquisition process the PM makes liaison visits to the user field commands to insure operational concerns will be properly addressed.

Commanders of Unified and Specified Commands actively participate in the Planning, Programming and Budgeting System (PPBS) wherein each are asked for their long range research and development requirements and priorities. The Commanders respond by letter directly to the Secretary of Defense. These requirements are documented in the Research and Development Annex of the Joint Strategic Planning Document. The JSPD is used as a primary source in developing the Defense Guidance.

The Commanders of the Unified and Specified Commands provide their views and comments on the objectives and priorities in the first draft of the Defense Guidance and later, they do brief their views and requirements to the Defense Resource Board (DRB) which determines the issues, priorities and solutions. Later, in the program review phase of PPBS after the Services have developed their programs in accordance with the Defense Guidance, the field commanders are once again asked to present their views on the Service's programs and the issues. Therefore, participative management with the Commanders of the Unified and Specified Commands does expose R&D managers to the requirements of the field commanders and the real world of the field.

NATO Exercises

QUESTION: The Administration continues to embrace the All Volunteer Force concept of manning the military forces, yet we hear repeatedly of gross inadequacies in our military personnel standards. Leaving aside controversial issues such as aptitude test scores, how is one to interpret the repeated reports in the press which appear to show that our forces usually come last or close to last in NATO tactical exercises. Are these reports accurate, and if so, what do they tell us about the AVF?

ANSWER: assume that the press reports cited on US performance in "NATO tactical exercises" are those covering our participation in international military competitions. Most of the press interest has been focused on the Canadian Army Cup competitions, a gunnery competition among tank platoons. The competition has been in existence since the 1960's, but the US Army did not begin participating until 1977. In its first two tries, 1977 and 1979, the Army finished last and next to last. In 1981 it finished third, very close behind the nation that finished second. However, this was the only NATO military competition of seven that the Army entered in 1981 in which it did not finish first. It finished first, for example, in competitions among armored cavalry units, helicopter crews, parachutists and marksmen.

The Air Force has occasionally performed poorly in similar military competitions, but it has generally done quite well. As with the Army, the occasional poor performance gets more media attention then the routine good performance.

Overall, US performance in military competitions has been creditable. However, the results of such competitions are not very reliable indicators of the capability of an entire military force. Insofar as any judgment can be made from such scanty evidence, it would appear to reinforce other indicators that show that the All-Volunteer Force is a capable force. I would be reluctant to draw any more definite conclusions from such limited evidence.

Indiscipline Rates

QUESTION: How does the incidence of drug abuse and disciplinary problems in our AVF compare with that of the conscript NATO allied forces?

ANSWER: We do not have any data on drug abuse and disciplinary matters for NATO allied forces upon which to base a comparison to corresponding statistics of the AVF.

QUESTION. One of the major factors contributing to declining morale and performance among our forces in Europe is said to be the inadequate and unsatisfactory housing provided for them and their families. We are assured that negotiations are proceeding, especially with the Germans, to provide more and improved housing, but these negotiations appear to be stalled on the basis of German lack of cooperation. At what level, on the U.S. side are these negotiations being conducted? Should this level be raised? Recognizing the tensions within the German government concerning the U.S. military presence in Germany, what broad significance should we attach to this apparent failure to provide for German defense?

ANSWER. The negotiations currently underway with Germany that deal with military housing are part of a broader plan known as the Master Restationing Plan (MRP). The current plan envisions the forward stationing of three U.S. brigades at three sites in Germany and would involve some 20,000 U.S. personnel. The plan emphasizes the German construction of family housing on a build-to-lease basis. Details associated with the timing, scope, and costs have yet to be identified. On March 18, the heads of U.S. and German delegations signed a charter in Washington that called for the creation of a bilateral Committee of Experts that will meet in Bonn in April to begin working out the details for implementing the plan. The Assistant Secretary of Defense for International Security (Policy) chaired the discussions that resulted in this charter and the Committee of Experts is composed of representatives from the Office of the Secretary of Defense and the Department of the Army. This is considered an appropriate level for these discussions. The Department views this initiative as a very positive step by the Federal Republic of Germany and adds to the many other significant burdensharing measures carried out by Germany in supporting U.S. forces stationed in Europe.

M-X and Protracted War

QUESTION: The M-X missile system is being constructed, it is said, to counter the gains in accuracy and warhead explosive power of the Soviet land-based missiles. Since the U.S. appears not to espouse "first strike" or "launch on warning" nuclear strategies, the only justification for building M-X would seem to be a belief in the "war-fighting" theory of the present Administration. Is it, in fact, the belief of the present Administration that protracted nuclear wars can be fought, and does the concept of winning such a war have any real meaning? What is the judgement of professional military people as opposed to that of the inhabitants of "think tanks"? If no adequate basing concept can be developed for M-X, is it a viable candidate for this "war-fighting" role?

ANSWER: The primary justification for building M-X is the same as for all parts of our Strategic Modernization Program--to deter nuclear war. The Soviets certainly appear to believe that a nuclear war could be extended in time and that they could win such a war. To deter an adversary which believes it can win a nuclear war in a meaningful sense, we must have forces which are sufficiently survivable and sufficiently enduring that our advasaries cannot believe such a strategy could be successful. The Administration believes, therefore, that such enduring, survivable forces decrease, rather than increase, the probability of war. Moreover, we have sought to counter the Soviet strategy without building anything even remotely resembling the Soviet warfighting posture--we reduced the planned number of M-X missiles from 200 to 100 and moved forward with the B-1 to enhance the survivability of the force least capable of initiating a first strike. The professional military people agree with this approach. We fully expect to develop survivable basing for the M-X to maximize its deterrent value.

Spectrum of Conflict Planning

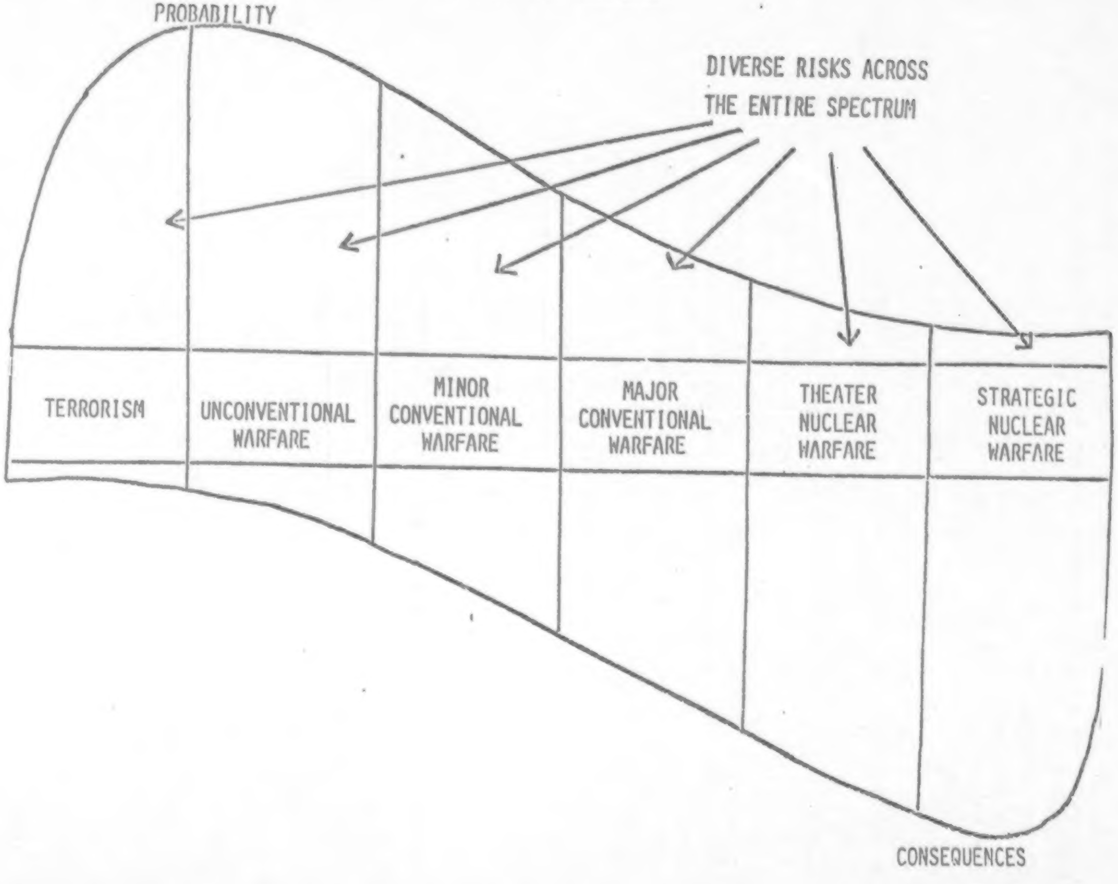
QUESTION: Is planning by the Defense Department broad enough th include being prepared for "brush fire" wars around the world as well as for a major confrontation with the Soviet Union? It seems to me our defense program discussion centers around a major war wile since WWII there have been limited encounters in such places as Korea, Viet Nam, El Salvador, Angola, Iran & Iraq, Afghanistan, Lebanon and other areas. This should, and I hope does, alert the DoD to the alternatives presented by non-nuclear war? Can you expand on this?

ANSWER: Department of Defense planning seeks to be prepared to wage war at any level of intensity, and for as long as necessary, to deter aggression and defeat the enemy should deterrence fail. The spectrum of intensity of potential conflict considered by Defense planning ranges from terrorism, where the rise of terror as a political weapon will continue to be a phenomenon of the international scene, to strategic nuclear warfare. (See chart on following page.)

While nuclear war, where the consequences are greatest is a major concern, we are also concerned with nonnuclear warfare, including low intensity conflict, because the possibility of occurrences appears greater. An assessment of the risks and consequences must thus be balanced against the probability of conflict occurrence. We seek to balance military capabilities so as to minimize the risks to national security within resource constraints to the extent possible across the conflict spectrum.

The conduct of any war must, under all circumstances, be clearly guided by a plan for terminating the war in a manner that achieves our basic national security objective--preservation of the United States as a free nation with our fundamental institutions and values intact.

SPECTRUM OF CONFLICT


PROBABILITY
DIVERSE RISKS ACROSS THE ENTIRE SPECTRUM
TERRORISM
UNCONVENTIONAL WARFARE
MINOR CONVENTIONAL WARFARE
MAJOR CONVENTIONAL WARFARE
THEATER NUCLEAR WARFARE
STRATEGIC NUCLEAR WARFARE
CONSEQUENCES

QUESTION:

Please discuss the over-all readiness of our RDF, in light of the many demands placed upon it. And are there efforts to more accurately forecast what demands will be placed on our armed forces down the line--so that we won't have to create another RDF overnight?

ANSWER:

Readiness is defined as the ability of forces, units, weapon systems, or equipment to deliver the outputs for which they were designed. The fact that many demands are placed on RDF units does not necessarily detract from their readiness. The 82d Airborne Division and the 101st Airborne Division (Air Assault) are the designated RDJTF Army divisions. (Deleted)

(deleted) Navy and Marine Corps forces include three carrier battle groups and a Marine Amphibious Force. The units that comprise these forces are notional and depend on force distribution at the time of crisis; therefore, their readiness rating cannot be provided.

In reference to your question of more accurately forecasting demands, the JCS continues to monitor developments as they occur throughout the world and changes requirements for contingency planning and force allocation as the need occurs.

JCS contingency planning provides for possible power projection requirements in areas critical to US interests. Through the Unified Command Plan, commanders of unified commands and Commander, Rapid Deployment Joint Task Force, are assigned geographic areas of responsibility. Through the Joint Strategic Planning System, (which is a dynamic system) these commanders are required to plan for a range of options, (from a show of force to direct military intervention), to protect US interests in their areas of responsibility, to include Third World areas. To complement those commanders with regional responsibilities, USCINCRED plans for remaining unassigned world areas.

Design Changes

QUESTION: A significant amount of "bad press" surrounds the buying habits of our military. The negative public reaction to allow for further increases in the Defense budget often lies in seeing tremendous cost overruns on new weapons systems. It is my understanding the Soviet Union allows only a tightly limited number of design changes as they pursue any weapons system. If new developments or needs arise they allow for the next system to encompass these changes. Does the Department of Defense intend, or has it already, made alterations in their design change method of procuring new weapons sytems?

ANSWER: We are very conscious of the effect design changes have on program cost growth and we are implementing several initiatives that should assist in resolving this problem. Our Pre-Planned Product Improvement Program accomplishes explicitly what you have asked. This procedure should minimize technological risk and allows for the advancement of technology through pre-planned upgrades or changes to a system or subsystem at specified intervals in the service life of the item. This procedure is also used in the commercial industry.

Providing adequate front end funding for test hardware is another initiative that will achieve early design maturity using the test-fix-test process and should lessen the number of design changes during the life of a program. This funding will enable program managers to procure additional test hardware and allow an increase in parallel testing, as opposed to sequential testing to facilitate not only the development testing but also operational and other testing to be accomplished concurrently. We feel these initiatives will decrease and control the number of design changes initiated during the production phase of a major system.

Question: Strategic policy involves both military and economic factors which, it need hardly be said, should be carefully coordinated. Is there a department in the Pentagon tasked with such overall strategic planning and coordination? Is there a civilian department at DoD level charged with purely military strategic planning? Does the FY83 budget request reflect military needs determined on the basis of a coherent U.S. military posture?

Answer: We recognize the interrelationship among military, economic and political factors and have structured defense planning to provide the necessary coordination. The Secretary and Deputy Secretary of Defense maintain the responsibility for providing a coordinated effort. The primary staff assistance and advice is provided by the Defense Resources Board (DRB), whose membership includes the Deputy Secretary of Defense, the Under Secretaries and Assistant Secretaries of Defense, the Service Secretaries, the Director of Programs, Analysis and Evaluation and an Associate Director from the Office of Management and Budget. The DRB provides advice to the Secretary of Defense on a gamut of topics, including the Planning, Programming and Budgeting System.

By law, the Joint Chiefs of Staff are tasked with providing for the strategic direction of our military forces. The results of their strategic planning are reviewed by the DRB which provides recommendations to the Secretary of Defense for final action. The comprehensive and coherent policy and guidance that results provides the basis for our defense budget.

FY83 DEFENSE POSTURE

QUESTION: A very substantial portion of the DoD budget is devoted to meeting mutual defense alliance commitments (I stress the word "mutual"). The European allies have shown reluctance to meet their fair share of what really amounts to their own defense. Japan continues to allocate less than 1% of GNP to defense while capitalizing on a one sided trading relationship with the U.S. to the tune of tens of billions of dollars per year in U.S. trade deficits. Negotiations with Europe and Japan regarding increasing their defense commitments appear to be stalled while the U.S. economy continues to deteriorate. Would it not apply pressure of the most direct kind if the Congress were to reduce the DoD budget in those areas which most directly support these poorly cooperating nations?

ANSWER: Reductions of U.S. budget for its military bases in Japan, approximately $2.2 billion in FY 1982, would hinder U.S. Far Eastern strategy rather than pressure the Government of Japan. While Japan benefits enormously from U.S. presence in Asia and the Western Pacific, U.S. bases in Japan make that presence possible and less expensive. Japan cannot be "pressured" in this manner unless we choose to withdraw from the Western Pacific and Indian Oceans entirely. The Japanese contributed $1.01 billion to the support of U.S. Forces in Japan in JFY 1981 and will contribute $1.05 in JFY 1982. Without these largely voluntary contributions our expenses there would be much higher. The Japanese contribution of over

$20,000 per U.S. service person in Japan is the most generous we enjoy in the world. As one specific example of this aid, Japan will spend $180 million for construction of new facilities for U.S. Forces in JFY 1982, an increase of more than 25 percent over the previous year. This will make the fourth straight year Japan's expenditure for voluntary construction for us has exceeded $100 million. In his meeting with President Reagan in May, 1981, Japan's Prime Minister pledged that support for U.S. Forces would continue to grow in the future.

Question: Some hard economic facts are staring members of Congress in the face as we just return from a week of talking with our constituents. The President's proposed budget calls for enormous deficits, not only for 1983 but through 1985. Other forecasters are more gloomy in their predictions for future deficit levels. The people are skeptical in seeing enormous outlays for defense while other government spending is slashed. A theme heard constantly from the folks back home is take a long hard look at Pentagon spending. Some reductions in the budget will likely be made during the next few months. Please prioritize the DoD needs--either by weapons systems or departmental requirement?

Answer: Our defense budget is the result of many months effort involving a reexamination of our objectives and strategy, the resulting force requirements and the realities of the fiscal constraints. The FY83 budget sets the foundation for the long-term program necessary to reestablish our military capability. Arbitrary cuts in our budget will do little in reducing the size of the overall deficit, but it will do much in crippling our national security program. As a result, we would have neither significantly lower deficits nor the military capability that is needed to protect our basic freedoms and worldwide interests. We have taken a long, hard look at Pentagon spending. The program that resulted provides a careful balance between the need to increase the readiness and sustainability of our current forces and the need to modernize and expand our force structure to meet future threats. We are determined to avoid the false economies of the past that have led to our deteriorating relative military position.

QUESTIONS SUBMITTED BY SENATOR STENNIS

Affordability

Question: Mr. Secretary, as we view the deficits estimated this year as well as 1983 and the outyears, can you tell us about the assessment that has been made by the Defense Department to assure that systems currently under development and being produced are affordable in the next few years?

Answer: We have made affordability a special point in this budget by budgeting to most likely cost, by revising the inflation estimation procedures, by buying economic production quantities, by using multiyear contracts where suitable, and by the careful overall attention to outyear plans. The deliberate extra care we have taken to fully and honestly price the budget, together with the fiscally constrained and thoroughly staffed planning process, are intended to correct the historical problem of overly optimistic Defense programs. I assure you, we intend that this program should be affordable and believe it is. The totals are well within the national economic capacity, they do not make unreasonable demands on the GNP. In addition, we are working with industry toward a smooth and carefully planned production step up that should avoid most of the potential bottlenecks or shortages that might otherwise occur.

Fielding Systems

Question: If we assume relatively modest increases in future budgets, can you assure us that these systems can be fielded and supported?

Answer: If the budget continues on the planned path, these systems can be fielded and supported. Because we recognize the futility of being unable to field and support new systems, we have directed initiatives to provide a stronger continuing review of support cost and testing, in addition to the emphasis given that aspect in the initial decisions.

Program Trade-offs

Question: Would you comment on the trade-offs that are considered between funding one program to achieve savings at the expense of stretching other programs.

Answer: Stretching programs is expensive because of rising prices and the costs of operating at uneconomical production rates. One alternative is to terminate marginal systems and procure those we can afford at economical rates that will still provide the required military capability.

Long-term Impacts

Question: Are the long-term impacts of total program costs and delays in deliveries of equipment to the forces considered when making these decisions?

Answer: Yes. We consider the increased total program cost and the cost of continuing older systems past their planned phaseout.

Soviet Perceptions of U.S. Defense Budget

QUESTION: Your statement mentions the commitment to defensive use of military strength. Isn't it possible that the large increases in the fiscal year 1983 budget will give the Soviets the perception of an aggressive and possibly offensive posture?

ANSWER: We can never say for certain what the Soviets perceive and why. However, it is sad to say, but perhaps my greatest disappointment since taking this office concerns the role that Soviet military power continues to play in the world. For several years expectations were widespread in the West that arms agreements and other understandings -- explict or tacit -- would have a universal rather than a unilateral effect on limiting the accumulation of weaponry and restraining the level of military spending both East and West. With the exception of the U.S. effort in Vietnam, the U.S. and its allies gradually reduced their defense efforts from the mid 50s through the mid 1970s. However, the Soviets continued to amass force without slackening during the same period; and, they have exploited that growing power in several areas of the world. Our previous defense policy has been overtaken by events and discredited by its failure to recognize and cope with the deterioration in the global military situation.

So we are at a critical juncture. Our long-term program has been carefully constructed to quickly begin to improve our military capability and add real strength in a prudent and determined manner over the next several years. If we do less, we increase the risk of war and invite attack on ourselves and our allies. Fortunately, by having the courage to significantly improve our overall military capability we have so far, I think, signaled the Soviet that we are indeed serious. If we continue these improvement initiatives and remain resolute in our long-term program, we will be able to positively influence Soviet perceptions and future actions.

CIVIL RESERVE AIR FLEET (CRAF) ENHANCEMENT PROGRAM

QUESTION: Your statement mentions a restructuring of the Civil Reserve Air Fleet (CRAF) enhancement program. This program has left much to be desired as concerns acceptance of the program by civilian airlines. Over $100 million remain available in prior year appropriations which have not been obligated. What are your plans for restructuring?

ANSWER: Response to the most recent Request for Proposal for the CRAF Enhancement Program demonstrated enthusiastic support for the program from both civil carriers and manufacturers. Over 100 aircraft were offered for retrofit with the final number reduced to 53 for contract award consideration. However, we decided not to accept any of the proposals submitted by the airlines last year for modification of existing aircraft because the projected costs were much higher than expected, and because most of the aircraft offered for modification were DC-10-10s, which are the least capable of the aircraft qualified for the program. In view of this situation, we plan to request Congressional approval to reprogram the unobligated prior year CRAF funds to supply part of the funds needed in FY 82 to start new production of the C-5B aircraft.

The Department of Defense is not, however, foreclosing the possibility of CRAF modifications, particularly for new production wide-bodied, long-range aircraft. Funds are tentatively budgeted in FY 84 and beyond for this purpose. Airline proposals for modification of aircraft will be evaluated on their individual merits in terms of availability, relative cost, and contribution to national security in a declared emergency. The CRAF enhancement program is designed to increase the augmentation provided by the Civil Reserve Air Fleet, which at the present time provides approximately 40% of the total U.S. intertheater airlift capability.

C-5, KC-10, C-17 AIRCRAFT

QUESTION: The Defense request includes funds for additional C-5 and KC-10 aircraft to enhance airlift mobility assets. You refer to these aircraft as having "minimum risk in cost, schedule and performance." Does this mean that the Defense position is that a C-17 aircraft is no longer required?

ANSWER: Our pressing near term inter-theater shortfall will be satisfied by the combined KC-10/C-5 program. Although the KC-10/C-5 program will add substantially to our inter-theater capability it will not provide the minimum additional outsize/oversize airlift recommended in the Congressionally Mandated Mobility Study. An aircraft designed to the specifications established for the C-17 will be required in the long-term (late 1980s and early 1990s) for two reasons. First, there is a need for outsize intra-theater capability to augment the airlift provided by the C-130s. Second, there will be the need to replace C-141s and some C-130 aircraft beginning in the early 1990s.

We are going to propose, therefore, that, subject to Congressional approval, a modest FY 82/83 C-17 R&D effort be continued with funds ($32M) from the unobligated FY 81 C-X appropriation. This effort would focus on improvements included in the C-17 design which can be methodically developed to produce more efficient structures and more efficient energy use for both military and civil aircraft. Specific areas to be investigated include low speed powered lift, engine core thrust reversing, winglet configurations, and cruise drag estimates. Another possible area of investigation is use of advanced structural materials.

In the longer term a C-17 type aircraft will be required, not only for airlift missions, but also as a common airframe for other unrelated missions, such as worldwide airborne command and control, and use as a tanker for the Marine Corps.

DEFENSE INDUSTRIAL BASE

QUESTION: You mention the need to strengthen the Defense Industrial Base of this country. This is a desirable goal. However, doesn't a rapid influx of funding lead to a boom-or-bust approach? Wouldn't a steady buildup of the industrial base over a period of years be of more interest to the private sector and still accomplish the goals of the Administration?

ANSWER: The strenghening of our industrial base is one of our top priorities. The manner in which we proceed with our procurement program has a very definite effect on the private sector base. One of the major problems in the past has been the instability of Defense procurement which has turned many contractors away from doing business with the Department of Defense. With increased funding support we have time-phased acquisition programs to insure more efficient rates of production, and program stability. We believe that added stability will permit the private sector base to become stronger, meet defense requirements efficiently and effectively, and fulfill the goals of the Administration.

Question: Former Secretary Harold Brown recently testified that fragmentation of the American Telephone and Telegraph Company would be detrimental to Defense communications and have a "lethal long-term effect." Would you comment on this?

Answer: The Department of Defense, through the Defense Communications Agency, is currently performing a detailed analysis of the Department of Justice-AT&T antitrust suit settlement agreement. That analysis will include an assessment of the impact of the settlement upon DoD communications needs. The most recent statement of the department's views regarding the settlement agreement are contained in the testimony of Lt. Gen. William J. Hilsman, Director, Defense Communications Agency before the Senate Commerce, Science and Transportation Committee on January 25, 1982. A copy of that testimony follows:

PREPARED STATEMENT OF LT. GEN. WILLIAM J. HILSMAN
DIRECTOR
DEFENSE COMMUNICATIONS AGENCY

Mr. Chairman and Members of the Committee:

I am here on behalf of the Department of Defense to comment on the impact of the Department of Justice - AT&T Antitrust Suit Settlement Agreement upon the provision of telecommunications services to the Department of Defense. The Department welcomes this opportunity to reaffirm our previously expressed view that legislation is necessary to assure that our telecommunications industry, in concert with the government, can meet our urgent national security and emergency preparedness requirements. These range from the broad spectrum of natural disasters like hurricanes, floods, and earthquakes, to the deterrence of nuclear conflict, the management of crises to prevent escalation, the command and control of the strategic forces, the mobilization of our industrial base and the nation's manpower, the successful conduct of warfare, and the termination of hostilities and recovery of the nation.

When Dr. DeLauer and I testified before you on June 11, 1981, regarding Senate Bill 898, we urged that Congress, and not the FCC or the Courts, should establish the goals of and guidelines for national telecommunications policy, including national security, in the 1980's and beyond. We also supported legislative resolution of the appropriate future structure for the telecommunications industry. Since that time nothing has occurred, including the Justice - AT&T proposed settlement, which alters our view of the necessity to update the Communications Act of 1934. Indeed, when Dr. DeLauer and I appeared last June, we had already been studying, and preparing a DoD analysis of the effects upon national defense and security and emergency preparedness of the divestiture of the Bell System Operating Companies from the remainder of the Bell System.

In presenting our testimony and in preparing the DoD analysis of the impact of various forms of divestiture, our paramount concerns have been in the area of emergency response capability. From our national security/emergency preparedness perspective, to obtain effective emergency communications, it is absolutely essential that: 1) extensive preplanning and pre-emergency arrangements be accomplished; 2) that a robust and survivable nationwide telecommunications network be provided; 3) that the capability to manage and control the network so as to reroute and restore service be continued and markedly improved to meet the changing threat; and 4) that technical standards continually be developed and enforced so that all portions of the nation's telecommunications resources are capable of interoperation and universal connectivity. We feel that to the extent such capabilities currently exist, it is because of an entity that had the motivation, authority and technical and financial wherewithal to ensure that such actions occurred. For the past 65 years the Bell System, with the cooperation and support of the other common carriers, has been that entity. This has been dramatically demonstrated in every national defense crisis since World War I and in innumerable natural disasters. Today, with roughly 80% of the nation's telecommunications network provided by the Bell System, to include the vast majority of our defense communications needs, AT&T has taken the lead and has possessed the "clout" to develop the nationwide telecommunications system that has served us in peace and war and upon which we must build to meet our future emergency needs. The establishment of uniform, nationwide technical standards and operating procedures has also resulted from the integrated R&D, manufacturing, and local and long distance operations of the Bell System. These factors have led us to express our view that divestiture of major components of the Bell System, including structural separation between the local exchange and interexchange functions, would impact system integrity and the Bell System's current ability to promptly provide emergency communications support and restoration.

Subsequent to our prior testimony and the completion of the DoD analysis, we have continued to review various past emergency responses of the integrated Bell System, potential future emergency needs, and the Bell System's current performance on our most critical U.S. Government communications. These historical reviews and gaming exercises have confirmed the national security and emergency preparedness value of the current common carrier and Bell System structure which can provide both interexchange and local exchange service on an "end-to-end" basis. Three examples will demonstrate what I mean.

In March 1975, an emergency of concern to general telephone users occurred when a Bell System switching office in New York City, containing one Class 5 switch and five Class 4 switches, was severely damaged by fire (CHART 1) depriving thousands of citizens of telephone service. The magnitude of the problem is depicted in CHART 2 attached to my testimony. The magnitude of the Bell System's response is best demonstrated by the vital statistics shown on CHART 3. As that Chart shows, nearly 4000 people, including 1250 from Western Electric and 25 from Long Lines and Bell Labs, worked round-the-clock to restore service in 23 days. Mobile-radio telephone units were also deployed from New Jersey Bell, Bell of Pennyslvania, New England Telco, and the C&P Telephone Companies to provide emergency service. The rapidity and effectiveness of the Bell System response was, in our view, directly related to its ability to marshal all available resources, from nearby operating telephone companies and the manufacturing, and long lines arms of the business, and to focus these resources upon the prompt restoration of service.

The value of this inherent emergency response capability of the integrated Bell System is further evident in the development of contingency plans for a potential large scale natural disaster such as a major earthquake. Under the provisions of the Disaster Relief Act of 1974 and in coordination with the NCS Operating Agencies, the Manager, NCS, has prepared a "National Plan for Communications Support in Emergencies and Major Disasters." This plan provides the basic managerial and operational structure for the telecommunications response to a catastrophic earthquake event. In preparing for this possible disaster, in 1980 the NCS performed an in-depth telecommunications assessment of what would be necessary if the State of California would experience a major earthquake. A review of the NCS data base of key communications facilities, concentrating on the Los Angeles and San Francisco areas which were identified as most critical, indicated that 34 key offices with supporting transmission facilities are located within a 55-mile radius in the Los Angeles area, and 50 such offices and supporting transmission facilities are within a 55-mile radius of San Francisco. CHART 4 attached to my testimony depicts these and other key facilities in relation to fault locations, and CHART 5 shows a summary of the common carrier communications switches contained in the 84 key offices surrounding San Francisco and Los Angeles.

As a result of that July 1980 analysis, NCS also determined that a high concentration of critical circuitry carrying high restoration priority assignments of national importance existed in the State of California (e.g., national warning systems circuitry, command and control circuitry). Two resultant observations made in the NCS assessment were that "restoration of federal government circuitry will be heavily dependent on the location" of any earthquake and that the "amount and level of residual communications and the capabilities of the commercial carriers for emergency restoral will be pacing factors which will govern the length of reduced communications from and to the impacted area." From this emergency preparedness contingency assessment, which was confirmed in a January 1981 Federal Emergency Management Agency report, it is obvious that the impact of any major earthquake would be much greater than the fire in the New York switching office, which contained only one Class 5, and five Class 4 switches. The Government is not, however, capable of providing anywhere near the necessary telecommunications response. Today, we would rely on AT&T to marshal national resources to do the job.

Finally, a recent analysis of the outage data on two categories of NCS Priority One circuits (i.e., those providing service to the most critical users in the Federal Government), demonstrates there is a significant difference in the frequency of outages and time for restoral on circuits provided exclusively by the Bell System and circuits provided by a combination of Bell System and other carriers. For the period February 1 through June 30, 1981, 98 separate Priority One circuits of the 1179 such circuits provided in CONUS exclusively by the Bell System, were reported to our Operations Center as having experienced outages. The total number of discrete outage incidents associated with these 98 circuits was 302. For the 387 Priority One circuits provided in CONUS by a combination of Bell System and other carriers, 118 separate circuits were reported as having experienced outages, with 516 discrete outage incidents. This analysis indicates that 8.3% of the exclusively Bell System provided Priority One circuits experienced outages during the measurement interval, while almost 31% of the combination Bell System-other carrier provided Priority One circuits experienced outages. Furthermore, the total outage time for exclusively Bell System provided Priority One circuits was 1326 hours, which equates to "down-time" of 3.1% and total resource availability of 96.9%. For the combination Bell System-other carrier circuits, the total outage time was 1450 hours, or a "down-time" of12.3%, with a total resource availability of 87.7%. These differences, on the Federal Government's most critical circuits, again demonstrate the national security and emergency preparedness value of the current Bell System structure which provides both interexchange and local exchange service on an "end-to-end" basis as well as a most robust rerouting capability. While I am not suggesting that other carriers cannot provide quality service, because they do, my point is that when we have to deal with more than one carrier, the problem is more difficult. As a Communicator for 28 years, I can verify the lesson learned here. "The less the number of people you have to deal with, the faster the response."

These three examples demonstrate that the integrated Bell System and the common carrier industry have been a national asset, providing substantial benefits to national defense and security and emergency preparedness. Furthermore, I cannot visualize the government developing the ability to replace this private sector capability which assures a nationwide telecommunication system and provides a rapid and effective response during times of crisis or disaster. We are, therefore, reviewing in detail the settlement agreement reached between the Department of Justice and AT&T to determine how it may impact on the means to ensure the continuation and enhancement of an effective emergency communications response capability.

Three provisions of the decree are pertinent to the concerns we at DoD have raised. They are:

> The requirement that the Bell Operating Companies (BOC's) provide "through a centralized organization, a single point of contact for coordination of BOC's to meet the requirements of national security and emergency preparedness."
>
> The provision permitting the BOC's to provide CPE for "emergency services."
>
> The requirement that AT&T, Western Electric and Bell Labs provide "priority" support to the BOC's until September 1, 1987, to enable fulfillment of the requirements of the settlement.

These provisions are broad and do not specify how the residual AT&T structure and divested BOC's will coordinate their activities, or how they will relate to the government, other interexchange carriers and local distribution companies, for national security and emergency preparedness purposes. We, nevertheless, appreciate the obvious efforts of the Department of Justice to meet our national security and emergency preparedness needs. We are also heartened by the expressed commitments of the Chairman of the Board of AT&T that the Bell System will satisfy our national security needs through the provisions of this settlement. We anticipate that the reorganization plan to be submitted by AT&T to the Department of Justice will address these matters.

At this early stage of review, however, let me enumerate several specific points that need to be addressed and elaborated upon to ensure this settlement meets our needs:

1) Today technical standards for the industry are developed by the Bell Telephone Laboratories submitted to AT&T Headquarters and promulgated down to their 22 operating companies. These standards are also coordinated with the United States Independent Telephone Association (USITA). The integrity of the network is absolutely dependent on the standards system. How will these standards be developed and implemented under this new structure?

2) In many emergencies of the past, such as hurricanes or floods, AT&T took equipment from one telephone company and gave it to another to meet the emergency requirements, and they did it fast. How will this get done under the proposed settlement? While the decree requires AT&T to provide the BOC's with "sufficient facilities, personnel, systems, and rights to technical information" to permit the BOC's to provide exchange telecommunications and exchange access services, the settlement does not require the BOC's to provide any resources to the centralized national security/emergency preparedness "point of contact." Moreover, how will they fund for these resources? The settlement does not address the financial treatment of whatever BOC investments and expenses are associated with this centralized entity. What is the probability that the various State regulatory commissions, when faced with increasing local service rates, will be receptive to any significant BOC financial or resource commitments for national security and emergency preparedness.

3) What is the definition of, and who decides what are "emergency services" for which the BOC's can provide CPE? In addressing S.898 we urged that any telecommunications carrier should be permitted to act free from

unwarranted restrictions in providing telecommunications facilities, services, or customer-premises equipment during times of emergency so that all such carriers could then provide an "end-to-end," complete communications link. Provisions to meet this need were thereafter included in the structural separation sections of S.898. The provision of the Justice-AT&T settlement permitting the BOC's to provide CPE for "emergency services" would, however, only permit them to provide local service and CPE, and not an "end-to-end" emergency service that involved interexchange communications unless arrangements can be made with interexchange carriers. Thus, while today and under S.898 we can turn to either AT&T Long Lines or a BOC to provide a complete "end-to-end" emergency communications link, under the settlement as written we could not obtain such a link from either entity absent those arrangements.

4) The provisions of the settlement directed at assisting the BOC's in developing the capability to independently provide exchange services and equal exchange access require AT&T, Western Electric and Bell Labs to give those BOC needs priority. How will this impact the priority emergency communications needs we seek to have AT&T, Western Electric and Bell Telephone Labs provide and how will conflicts in these priorities be resolved?

These are but some of the questions which need to be addressed and resolved in a manner that will preserve an effective "end-to-end" emergency communications response capability. We expect to discuss these issues with the Department of Justice and they have assured us they will be addressed in reviewing the details of the reorganization plan. Nevertheless, even if such questions are satisfactorily answered in the implementation of the settlement, our conviction remains strong that legislative modernization of the Communications Act is imperative. Indeed, in some respects this settlement increases the need for legislative action.

When Dr. DeLauer and I testified before you last June, we indicated the Department of Defense believed legislation in three broad areas was required to ensure this Nation's telecommunications industry would fully meet our national defense and security and emergency preparedness needs. First, we submitted that there must be pervasive recognition, in law, of the critical importance of the telecommunications industry to national security and emergency preparedness. The Justice - AT&T settlement does not and could not solve this problem.

Second, we stated that there must be legislative safeguards requiring all telecommunications carriers to engage in joint network planning and management, to develop plans and procedures for protection and restoration of essential telecommunications, and to prepare for the interconnection and interoperation of facilities and services when necessary to meet national defense or emergency preparedness needs. If the settlement is now implemented, it is probable that several additional major, non-Bell telephone companies will be created (i.e., the BOC's). Those sections of S.898 which address Protection and Restoration of Essential Telecommunications and Network Planning and Management, and apply to all carriers, thus become even more significant.

Third, we indicated that Congress should legislatively resolve the appropriate future structure of the telecommunications industry to avoid subjecting all users to the years of uncertainty and turmoil resulting from different and conflicting regulatory and judicial initiatives. In our view, the settlement cannot assure that the regulatory framework of the industry will be consistent with the structure established by the settlement. For example, the FCC's Computer II decisions, which are based upon the regulatory framework embodied in the 1934 Communications Act, including the interstate-intrastate jurisdictional split, clearly have not been overridden by a settlement which is premised upon a regulatory/deregulatory framework and an interexchange-intraexchange jurisdictional split which do not yet exist in law. Legislative action is necessary to assure this consistency.

In conclusion, there are still many unaddressed and unanswered questions in this settlement agreement. We are working the details of these questions and will attempt to have the implementation plans address as many of these needs as possible. There is, however, no doubt in our mind that we need legislation to assure that this nation's telecommunications system will meet national defense and security and emergency preparedness requirements. The settlement agreement simply does not and probably could never meet all of the significant concerns which have been the basis for our view that legislative modernization of the complex laws governing this nation's telecommunications industry is essential. We continue to urge the Congress to move forward to update the legal framework in which this industry operates.

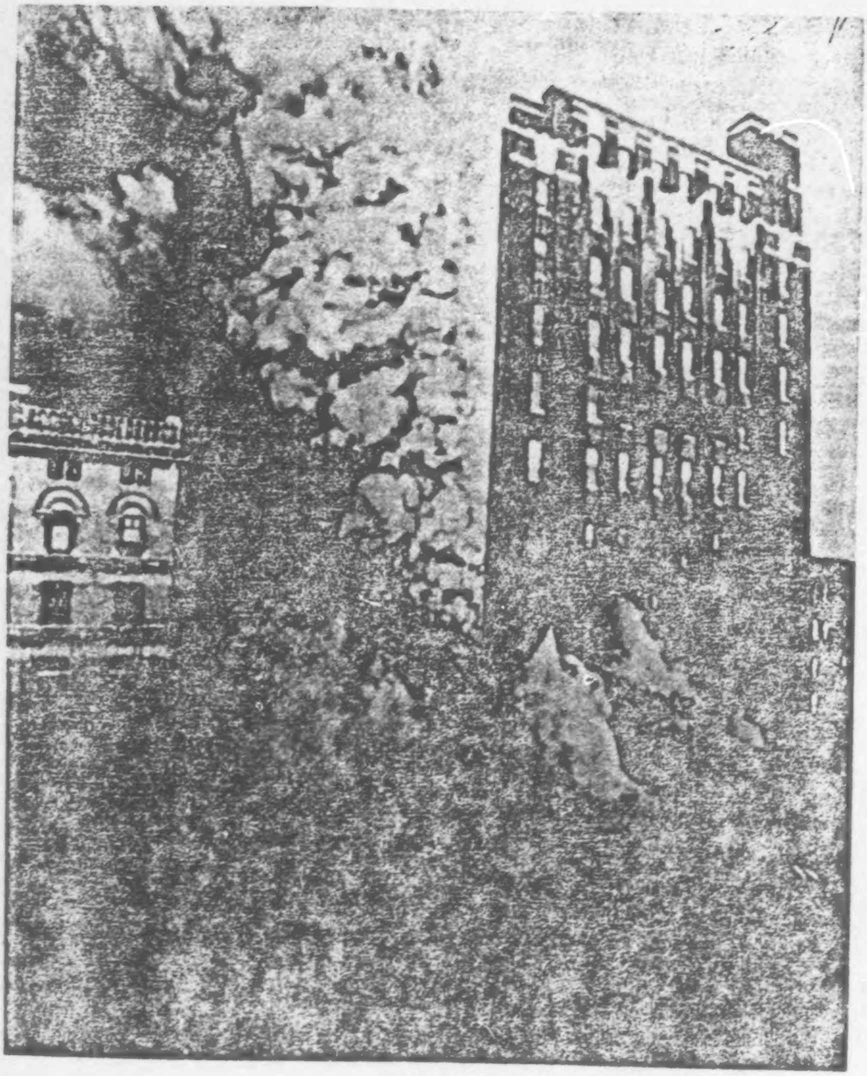


CHART 1

NEW YORK FIRE

SOME VITAL STATISTICS:

- 6000 TONS OF DEBRIS REMOVED
- 260 TONS OF UNDERGROUND CABLE REMOVED
- 600,000 POUNDS OF AIR FREIGHT SHIPPED
- 10,000,000 RELAYS CLEANED BY HAND
- 1.2 BILLION FEET OF WIRES PLACED UNDERGROUND
- 8.6 MILLION FEET OF CROSS-CONNECTION WIRE USED, OVER 5 MILLION WIRES OF WHICH WERE SPLICED UNDERGROUND
- 570,000 FEET OF INSIDE WIRING CABLE USED

CHART 2

NEW YORK FIRE

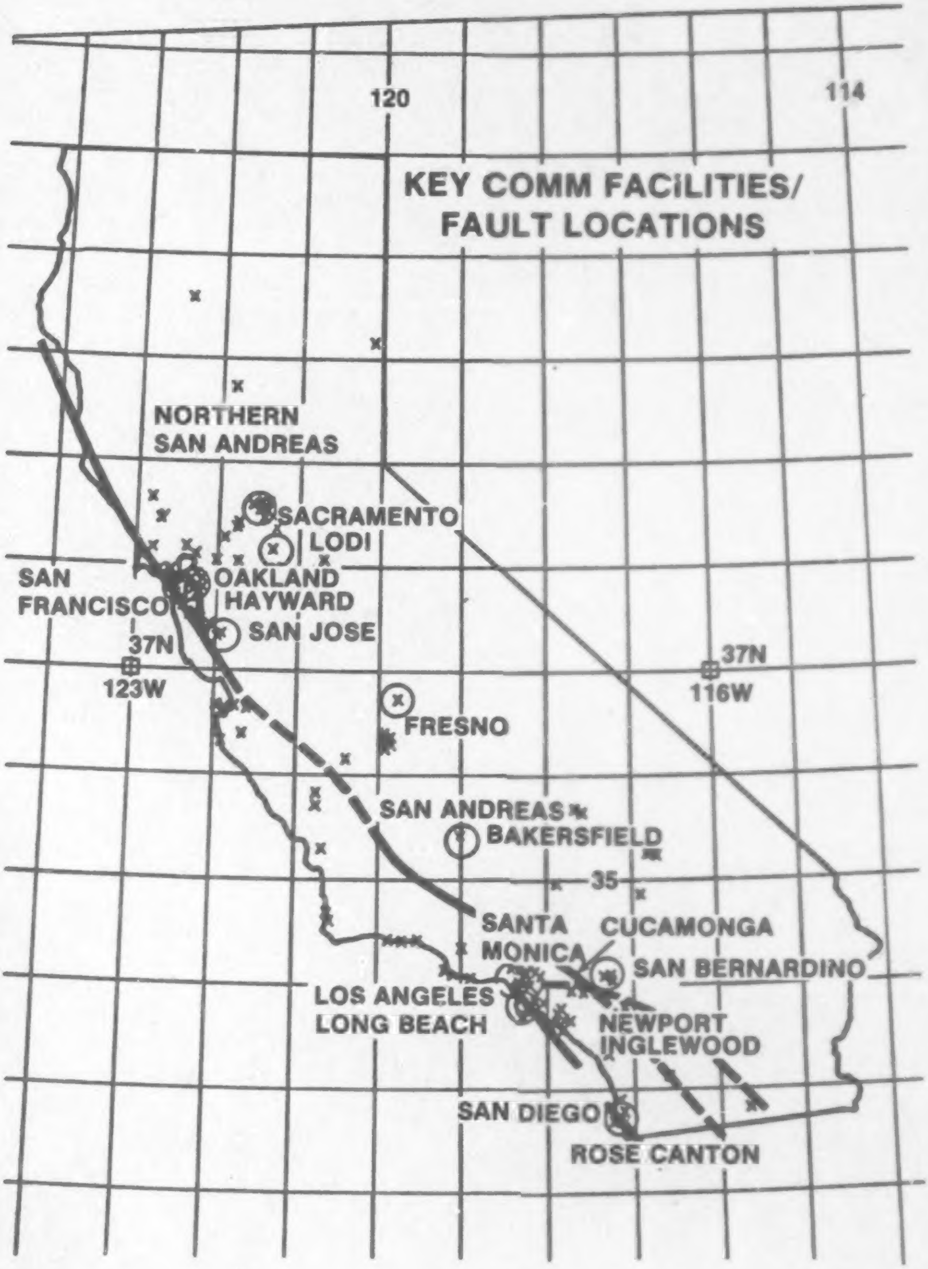
NEARLY 4000 BELL SYSTEM PEOPLE, SOME FROM OTHER PARTS OF THE COUNTRY, WORKED ROUND-THE-CLOCK TO RESTORE SERVICE IN 23 DAYS

PERSONNEL ASSIGNED	
CONSTRUCTION	1197
OTHER NEW YORK TELEPHONE	945
WESTERN ELECTRIC	1250
BELL TELEPHONE LABORATORIES AND AT&T LONG LINES	25
OUTSIDE CONTRACTORS	538
TOTAL	3955

MOBILE RADIO-TELEPHONE UNITS
WERE DEPLOYED FROM BELL OPERATING COMPANIES IN N.J., CONN., PA., W. VA. AND ELSEWHERE IN N.Y. TO PROVIDE EMERGENCY SERVICE

CHART 3

CHART 4


120
114
KEY COMM FACILITIES/
FAULT LOCATIONS
NORTHERN
SAN ANDREAS
SACRAMENTO
LODI
SAN
FRANCISCO
OAKLAND
HAYWARD
SAN JOSE
37N
123W
37N
116W
FRESNO
SAN ANDREAS
BAKERSFIELD
35
SANTA
MONICA
CUCAMONGA
SAN BERNARDINO
LOS ANGELES
LONG BEACH
NEWPORT
INGLEWOOD
SAN DIEGO
ROSE CANTON

SWITCH CLASS	SERVICE	SAN FRANCISCO	LOS ANGELES
5	LOCAL SERVICE	168	230
4	WITHIN METROPOLITAN AREA	7	9
3	SECTOR-PORTION OF STATE	5	4
2	REGION-MULTISTATE	3	2
1	NATIONWIDE	0	0

CHART 5

MULTISHIP COST SAVINGS

QUESTION: Admiral Rickover has been quoted as saying that NIMITZ-class nuclear carriers would only last about two days in an all-out war. Yet Defense is requesting an additional two carriers at a cost of over $7 billion in the FY 1983 budget. Is it really wise to initiate work on two of these carriers in a single year?

ANSWER: In an all-out nuclear exchange, everything is vulnerable to a direct hit. Cities and land bases are particularly vulnerable due to their immobility. The carrier is our least vulnerable ship due to its superior armor, mobility, sophisticated damage control systems and the mutual support provided by the other elements in its assigned battle group. The wisdom of whether to initiate work on two carriers in a single year is based on the requirement to build toward fifteen large deck carriers in order to eventually attain that prudent minimum number of carriers to meet national and naval objectives in time of war. From the Navy's standpoint, we are, for the first time in the history of nuclear carrier acquisition, on the verge of contracting for construction of these ships in the most economical way possible. To reap the advantages requires a firm commitment for a stable two-ship program. With such a commitment, the objective of attaining these ships faster and at significantly less cost is achievable.

Question: Just what economies do we achieve by ordering two carriers in a single year?

Answer: The economies, estimated cost avoidance, of two CVNs funded in a multiship buy in FY 1983 over a traditional buy of two carriers - one in FY 1984 and one in FY 1986 - are listed below:

- Reduced escalation due to earlier deliveries - $304 million.
- Economic order quantity from multiple ship set buys - $230 million.
- Reduction of start-up, set-up, other non-recurring and recurring costs - $100 million.
- Improved planning, manpower utilization and productivity - $120 million.

There are also direct and indirect benefits from the stronger industrial base that the multiship plan will initiate. This strengthening is realized through the improvements in vendor continuity and reduction of production gaps at both the prime and subcontractor levels.

The importance and necessity of earlier delivery of these ships to the fleet cannot be overstated if we are to restore maritime superiority. Attempting to put a dollar value on earlier delivery is, however, impossible.

CARRIER BATTLE GROUP

QUESTION: It has been estimated that a single carrier battle group will cost about $17 billion. Is this a good estimate? Would you tell us the ships involved in each of the projected 15 battle groups?

ANSWER: The estimated procurement cost for a notional carrier battle group centered on a single nuclear powered aircraft carrier is $11.21 billion (FY-83 dollars). This includes procurement of one CVN, two CG-47, two DDG-51, two DD-963, one carrier air wing and six LAMPS III helicopters. For force level planning purposes, notional carrier battle groups have been defined which are centered on one or two carriers. These notional carrier battle groups are composed of the following ship types:

Single Carrier (CVBG)	Two Carriers (CVBG)
1 CV	2 CV
or 1 CVN	or 2 CVN
2 CG-47	3 CG-47
2 DDG-51	5 DDG-51
or 2 CGN	or 5 CGN
2 DD-963	4 DD-963

Inefficiencies of Temporary Employees

QUESTION: The Budget request seeks to completely eliminate the backlog of depot maintenance. Isn't this really inefficient when one considers that the use of temporary employees will increase the cost per unit of output?

ANSWER: No. The use of temporary employees can be efficient in the long run as it gives managers the flexibility to employ, on a full time basis, only those employees that are needed to meet recurring workload demands. Temporary employees can then be employed to meet peak workload demands without the need to staff at peak workload levels. The use of temporary employees does not increase the cost per unit of output. (Although it may decrease the cost per unit output by spreading fixed cost over a larger base.)

The impact of not using temporary employees, in many instances, is not an economic impact, but rather one of not accomplishing the work due to an insufficient number of workers.

Orderly Scheduling of Workload

QUESTION: Doesn't reducing the backlog to zero preclude an orderly scheduling of workload in economic lots for efficient processing?

ANSWER: No. There are two kinds of backlogs - funded and unfunded. A funded backlog is that work which is financed by appropriated funds but which is in excess of the exact capacity of depot activities to accomplish. A minimal backlog of this nature is necessary in order to assure a smooth flow of work into the depots.

An unfunded backlog is work which is required to be accomplished but for which funding is not provided. While the FY 83 budget provides for elimination of unfunded backlogs (requirements) in appropriated funds, funded backlogs to assure an orderly scheduling of workload into the depots continue to exist.

Relation of Readiness to Depot Maintenance Backlog

QUESTION: Isn't it true that previous audit reports have indicated that depot maintenance backlogs are not necessarily related to readiness problems?

ANSWER: Audit reports have been unable to quantify a direct correlation between backlogs and readiness. However, the inability to do so is not proof that such a relationship is nonexistent.

Extending the operation of a ship or aircraft beyond its scheduled induction date may not appear to be an impact on the readiness posture of the Services. However, the cumulative effect of such extensions will ultimately result in a reduced material readiness of the affected weapon systems in the long run.

8

Gradual Decrease of Depot Maintenance Backlog

QUESTION: Wouldn't it be more reasonable and efficient to reduce the backlogs to more manageable levels through a gradual increase rather than a surge of funds to eliminate them?
ANSWER: Our goal is to reduce depot backlog at the earliest opportunity. If any efficiencies were to be realized by a gradual increase in depot maintenance funding, they would be far outweighed by the adverse impact on readiness.

QUESTION: The Navy has 16 ships backlogged for overhaul. Would it be possible to input all of these ships during fiscal year 1983 and still meet operational requirements?
ANSWER: The Navy currently has 11 ships in the FY 83 backlog, not 16 as indicated. It is not possible to input these 11 ships into the overhaul schedule in fiscal year 1983 since they are required to carry out operational commitments, hence, they were deferred for operational considerations.

QUESTION: Does the shipyard capacity exist to absorb the additional depot maintenance backlog work with the increases in shipbuilding and reactivation?
ANSWER: Yes there is ample shipyard capacity to overhaul the backlog if the ships were available for overhaul. Since the backlog is now made up of only operational deferrals they are not available for overhaul during fiscal year 1983.

European Public and LRINF

QUESTION: Are you concerned that very vocal elements of several European countries scheduled to receive the Ground-Launched Cruise Missile and the PERSHING II missile continue to oppose basing of these systems in Europe? Do you continue to believe that the opposition of these elements can be overcome and the missiles will be available on schedule to enhance NATO's near-term need for the long-range theater nuclear mission?
ANSWER: While we do not dismiss lightly the concerns of those elements of the European public opposed to LRINF modernization, the US and other NATO governments remain steadfast in our commitment to proceed with NATO's December 1979 dual-track decision on LRINF modernization and arms control. Vocal opposition in some quarters in Europe has not affected the development and deployment schedules for the PERSHING II or GLCM.

If the US were to do anything less than to move ahead with plans to meet our commitment to base LRINF in Europe, we would encourage the Soviets to heighten their propaganda campaign in Europe against NATO's INF program, and at the same time we would provide little incentive for the Soviets to engage in serious arms control negotiations. It was as a result of NATO's demonstrated resolve to modernize its INF that the Soviet Union was persuaded to negotiate in Geneva. Now, more than ever, it is essential that we press forward with our plans to deploy PERSHING II and GLCM in Western Europe. To do otherwise would foster Soviet confidence in their Alliance-splitting tactics and prolong the negotiations.

QUESTION: Your justification material states that the "Soviet economy suffers from the excessive demands of defense spending--estimated at 12-14 percent of GNP."

Although our percentage of defense spending to GNP is not as great, isn't it true that we are suffering from a similar ill?

ANSWER: The United States can and must afford whatever is necessary to meet its bona fide security requirements. During the 50's and 60's we spent 8-9 percent of GNP on defense without suffering economically. The current five year defense program reflects 6.3 percent of GNP in 1983 and 7.2 percent of GNP in 1987.

QUESTION: As we increase our military capabilities, isn't this a signal to Soviet authorities to institute similar increases and we just have a new round of arms spending?

ANSWER: US restraint over the past few years has not been reciprocated by the Soviet Union, and the momentum of their unprecedented buildup bodes ill for future restraint on their part. We are now in the position of having to redress imbalances that have arisen as a result of our restraint and their buildup.

DEVELOPMENT OF A NEW ADVANCED BALLISTIC REENTRY VEHICLE (ABRV)

QUESTION: The fiscal year 1982 supplemental request includes funding to initiate development of a new Advanced Ballistic Reentry Vehicle (ABRV) for the M-X missile. This would replace the MK 12A vehicle which was planned for the M-X. Just what advantages will the ABRV provide beyond the capabilities of the MK 12A?

ANSWER: ABRV is advanced technology reentry vehicle with improved accuracy, enhanced all weather capability, and increased hardness against nuclear effects. It has growth potential for a higher yield warhead, will incorporate modern safety features (which will reduce even further the already very small chances of a nuclear accident), and will use significantly less nuclear materials than the MK 12A at equivalent yield. The ABRV will provide an important element of diversity and advanced capability in the MIRVed ICMB force.

COST TO DEVELOP THE ABRV

QUESTION: Isn't it true that development of the ABRV will cost an additional $1 billion?

ANSWER: The ABRV cost increment over the MK 12A baseline is approximately $881 million in FY 1982 constant dollars. Offsetting cost advantages accrue as a result of the decision to proceed with ABRV: the ABRV warhead requires less scarce Special Nuclear Material (SNM) than the MK 12A warhead. (Savings resulting from the more efficient use of SNM are estimated to be approximately $500 million ($ FY 1982).) Also, if the MK 12A were retained, an improved arming and fuzing system would have to be added, increasing the cost by approximately $259 million ($ FY 1982). These savings and cost avoidances tend to offset the cost of ABRV.

SOVIET TRAINING HOURS

QUESTION: As a readiness initiative, the flying hours available per pilot each month has increased the past several years. In fiscal year 1983, the request is to exceed 18 hours per month. Do we have any information as to how many hours Soviet pilots fly per month?

ANSWER: Our information indicates that Soviet pilots fly an average of (deleted) hours per month.

DIFFERENCES IN AIR FORCE TRAINING

QUESTION: Why would Soviet doctrine dictate such a differing view as to requirement for flying proficiency from that of the United States?

ANSWER: The hours flown by the Soviet are (deleted) that programmed for the US fighter pilots, but meet Soviet mission and training requirements. Some of the reasons for this are: the Soviets do not have to set up military operating areas for training purposes as we do, thus they have shorter distances to travel to conduct training (in fact, Soviet TACAIR sorties average (deleted) (deleted)compared to several times that for US sorties); they have almost complete freedom of movement due to a near total lack of commercial and general aviation in the Soviet Union and East Europe compared to the Continental US or Western Europe; and the Soviet tactical fighter pilot is traditionally held under much tighter ground control than his US counterpart, leading to shorter training time requirements.

Additionally, most US fighter pilots are trained to conduct several missions in both the air-to-air and air-to-surface roles. This is required to optimize the inherent flexibility of the aircraft. Additionally, US fighter pilots are considered to be better trained in general than their Soviet counterparts, particularly in the area of exercising more tactical initiative in combat. This yields more combat capability, but requires more training in the air. Finally, it must be remembered that the global nature of our Air Force committments dictate increased deployment flying times.

SHIP OVERHAUL BACKLOG

QUESTION: The Fiscal Year 1983 budget completely eliminates the backlog of depot maintenance which has existed for many years. For example, 16 ships were awaiting overhaul at the start of Fiscal Year 1982. Could these ships all be input into overhaul and not affect operational requirements?

ANSWER: There is a misunderstanding. For operational rather than fiscal reasons, the Navy does not plan to have a zero backlog of overhauls in FY 1983. Rather, there will be 11 ships in the FY 1983 backlog. Although there is ample shipyard capacity to overhaul the 11 ships, the Navy cannot input the eleven into the FY 1983 overhaul schedule because the ships are required for operational commitments.

15 CARRIER BATTLE GROUPS

QUESTION. Fifteen naval battle groups are projected in the future, with each group having a nuclear carrier. Some authorities believe that the IOWA-class battleships being reactivated could be the main ship in several of the battle groups. What are your thoughts about this proposal?

ANSWER. A "battle group" is a force of warships able to perform the full spectrum of at-sea offensive warfare tasks. It normally includes a carrier (not necessarily nuclear), surface warships, and when circumstances warrant, submarines. A Surface Action Group (SAG) is a force comprised of surface combatants which necessarily perform roles of lesser scope than battle groups. The Navy envisions using battleships as the predominant units of SAGs, acting in support of carrier battle groups in high threat areas or as independent tactical forces in areas of low to moderate threat. The Navy plans such an employment to extend the reach of battle groups while reserving the aircraft carriers for those tasks which only they can fulfill. Battleships will also provide naval gunfire to support amphibious operations or provide off-shore support to any US forces ashore in ocean littorals, and, armed with cruise missiles, will be used to enhance protection of sea lines of communication, replenishment groups or economic shipping. Battleship-led SAGs are not planned to have an organic capability to maintain air superiority or conduct distant antisubmarine warfare; thus they will not be interchangeable with carrier battle groups. Accordingly, the Navy does not plan that reactivation of the four battleships will result in any increase in the number of battle groups; but the Navy's ability to execute wartime missions should improve and the strain on the Navy's peacetime responsibilities, especially for low threat area deployments, should be eased.

SEAFIRE

QUESTION: The Department has been developing a shipboard laser illuminator called SEAFIRE for the past several years to use with a five-inch guided projectile. The system would provide fire support for Marine forces. The Marines have been very supportive of this system, but the program has now been dropped as one of the "Marginal" programs during consideration of the fiscal year 1983 budget. Why was this program eliminated, and what can the Marines expect as an alternative fire support capability?

ANSWER: The recent termination of the SEAFIRE electro-optic fire control system was triggered by a large, unexpected cost increase in the 5" semi-active laser guided projectile (GP) program. This event caused a major review of the requirements for these systems and their relative priority among all Navy RDT&E/acquisition programs. As a result of this review, the programs were terminated for a combination of affordability and priority reasons.

QUESTION: The budget will provide funds for development of the TRIDENT II (D-5) missile. Is it possible this missile could be a candidate for the Continuous Patrol Aircraft (CPA) mission?

ANSWER: On the surface the D-5 appears to be a good candidate for the CPA mission. In fact in previous looks at the feasibility of the Continuous Patrol Aircraft, the Air Force did consider the D-5 missile and found it to be usable. (Deleted) (deleted). Also, technically feasible movement toward missile commonality raises concerns that similar systems would suffer similar vulnerability to defensive countermeasures and reliability and aging problems. Currently there are no on-going efforts to do any further analysis of D-5 CPA application.

RETIREMENT OF B-52Ds

QUESTION. The current plan is to retire all five squadrons of B-52Ds by the end of FY 1986 and then modify the B-52G aircraft for the conventional weapons bombardment capability. What will this modification cost? Couldn't some portion of the B-52D fleet be retained for this mission beyond 1986? What would be the fiscal implications of such an extension?

ANSWER. Three B-52D squadrons are scheduled for retirement in early FY 83/1, with the last two squadrons retiring in FY 85/4 and FY 86/4 respectively. To provide additional flexibility for conventional power projection, 67 non-ALCM B-52Gs will receive an external conventional modification in FY 83 and FY 84. The modification will increase the conventional weapons-carrying capability of the B-52G from 27 to 45-51 at a total programmed cost of $9.0M.

This modification combines with several other factors to provide a conventional force that is superior to the B-52D. The B-52G has longer range (making them less tanker dependent), more capable ECM (for survival in a NATO environment), and an on-going offensive avionics system (OAS) mod for improved accuracy. Other disadvantages of retaining B-52Ds longer than programmed include exacerbating an existing tanker shortfall (by about two KC-135 equivalents for each B-52D added back) and removing an experienced manpower pool for the B-1B.

Air Force is retaining the last two B-52D squadrons as inexpensively as possible, making maximum use of existing resources. The aircraft selected for retention were recently modified with the new B-52D bomb nav system (BNS) and most received periodic depot maintenance. Spares are used from existing stockpiles and those aircraft that are retired. All of this assumes FY 85/86 retirement. If these B-52Ds were to be retained beyond their scheduled retirement dates, Air Force would need to re-initiate periodic depot maintenance, procure spares and exchangeable parts and, depending on how long the system would be retained, obtain additional reliability and supportability mods. These support costs, combined with the currently unprogrammed costs for operating the B-52D, would approximate the following:

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
TOA (TY $M)	30	48	64	118	174	185

AERIAL REFUELING CAPABILITY

QUESTION: Aerial refueling capability is being enhanced by the decision to re-engine 300 KC-135 aircraft over the next six years. This will increase overall tanker capability by over 50 percent. What are the plans for the remaining KC-135 fleet?

ANSWER: The remaining active KC-135 tankers will serve in the same roles and missions as they do today. Over the long-term, the Air Force intends to reengine all KC-135As with the CFM56 engine. We plan to buy reengining kits for 300 KC-135s, approximately one-half the total force, during the FYDP period (FY 83-87).

ROLE OF THE KC-10s

QUESTION. With the additional capability provided by the reengined KC-135 fleet, what will be the role of the KC-10s which are being procured during the next several years?

ANSWER. The KC-10s are being procured to enhance Air Force mobility and force projection capabilities. Specifically, the KC-10 will be used in tactical fighter and strategic airlift aircraft deployments. Its advantages as a tanker and its supplementary cargo ability are particularly important on long-range, non-stop deployments where third country overflight rights and en route staging base access may not be available to deploying US forces.

SUBROC

QUESTION. Your justification material mentions that the submarine launched rockets (SUBROC) are technologically obsolete and programmed for phaseout. As the ASW Standoff Weapon, designed for surface ship or submarine launch, is still in development and will not be available for quite some time--what are your plans for the nuclear ASW mission during the interim period?

ANSWER. SUBROC phaseout will take place over an extended period (deleted) during which our attack submarine force will maintain a reduced capability to employ SUBROC. We currently have 63 SSN's capable of employing SUBROC, and each will retain that capability until it receives the TOMAHAWK cruise missile capability. (Deleted) of the 63 SSN's will not be modified for TOMAHAWK and thus will retain the SUBROC capability until they are retired from service (deleted). The new Common ASW Standoff Weapon, which can carry either a conventional or nuclear payload, is scheduled to achieve Initial Operational Capability (deleted). It is an all-digital weapon and thus, unlike SUBROC, is fully compatible with the modern digital fire control system used for TOMAHAWK.

It should be noted that the current SUBROC inventory is limited and decreasing steadily as required to satisfy the warhead quality assurance testing requirements of the Department of Energy (deleted).

Nevertheless, there will at all times be enough warheads to support SUBROC missile loadouts on all the SSN's retaining the capability to employ them. This ensures that our submarine tactical nuclear ASW mission will be continually supported until the introduction of the new standoff weapon.

SUBCOMMITTEE RECESS

Senator STEVENS. Thank you very much, Mr. Secretary.

The subcommittee will stand in recess until Tuesday, March 9, at 9 a.m. when we will receive testimony on the fiscal year 1983 Defense budget overview.

[Whereupon, at 11.05 a.m., Tuesday, March 2, the subcommittee was recessed, to reconvene at 9 a.m., Tuesday, March 9.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1983

TUESDAY, MARCH 9, 1982

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9 a.m., in room 1223, Everett McKinley Dirksen Senate Office Building, Hon. Harrison Schmitt, presiding.

Present: Senators Schmitt, Andrews, Kasten, and Rudman.

DEPARTMENT OF DEFENSE

ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

STATEMENT OF JACK R. BORSTING, ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

ACCOMPANIED BY:

CLYDE O. GLAISTER, DEPUTY ASSISTANT SECRETARY OF DEFENSE (PROGRAM/BUDGET), OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

MAJ. GEN. ELTON. J. DELAUNE, USA, DIRECTOR OF THE ARMY BUDGET, COMPTROLLER OF THE ARMY

REAR ADM. RICHARD A. MILLER, USN, DIRECTOR, BUDGET AND REPORTS OFFICE, NAVY COMPTROLLER, DEPARTMENT OF THE NAVY

JACK K. UMPHREY, DEPUTY DIRECTOR OF THE BUDGET, HEADQUARTERS, U.S. AIR FORCE

JOHN W. BEACH, DIRECTOR FOR PLANS AND SYSTEMS, OFFICE OF DEPUTY ASSISTANT SECRETARY OF DEFENSE (PROGRAM/BUDGET), OASD (COMPTROLLER)

BUDGET REQUEST

Senator SCHMITT. The hearing will come to order.

We welcome the Secretary here with us this morning. This is the time scheduled to conduct an overview of the fiscal year 1983 Defense budget. This hearing is, in effect, an extension of last week's session with the Secretary of Defense. That hearing was to review the Defense posture but resembled a budget review in actuality.

As mentioned previously, the total budgeted in fiscal year 1983 for programs funded in the Defense appropriations bill is to $245.7 billion in budget authority and $205.2 billion in estimated outlays. The budget authority request is $46 billion above appropriations to date for the current fiscal year, an increase of 23 percent. The projected outlays are about $33 billion above fiscal year 1982 estimates, an increase of 19 percent.

REQUEST FOR SUPPLEMENTAL APPROPRIATIONS

The President has also transmitted a request for $2.1 billion in supplemental appropriations for various programs. Outlays from this additional budget authority are forecast at $1.3 billion in fiscal year 1982. There is a $5.4 billion pay supplemental which we are told the President will transmit to Congress later covering the military and civilian pay raise of last October.

PAY RAISE REQUEST

Another contingency within the budget projections is $4.1 billion in fiscal year 1983 to cover the proposed military and civilian pay raises for that year. There will undoubtedly be a supplemental program need in fiscal year 1983 as well, but there is no contingency built in for that beyond some $137.4 million for proposed legislation.

TABLE ON OUTLAY LEVELS

We will ask the Department to construct and supply a table for the hearing record displaying all of these various appropriation and outlay levels, enacted for fiscal year 1982 and requested for that year and for fiscal year 1983, together with current estimates for contingencies in both years. These figures should be related to the Defense appropriations bill, and not to the entire Defense budget.

[The table follows:]

DEPARTMENT OF DEFENSE SUMMARY, FISCAL YEAR 1982 AND FISCAL YEAR 1983

[In millions of dollars]

	Budget authority						Outlays					
	DOD Appropriation Act		Military Construction/Family Housing Act		Grand total DOD		DOD Appropriation Act		Military Construction/Family Housing Act		Grand total DOD	
	1982	1983	1982	1983	1982	1983	1982	1983	1982	1983	1982	1983
Total military functions	199,899	245,516	7,066	8,213	306,965	253,729	172,186	205,542	4,791	6,412	176,977	211,954
Proposed supplemental	2,116		199		2,315		1,263		91		1,354	
Contingency:												
Civilian and military pay raises	5,136	3,797	9	14	5,145	3,811	4,882	3,929	6	15	4,888	3,944
Wage board increases	247	266	7	12	254	278	188	329	5	12	193	341
Proposed legislation		137				137		137				137
Subtotal contingency	5,383	4,200	16	26	5,399	4,226	5,070	4,395	11	27	5,081	4,422
Total budget estimates	207,398	249,716	7,281	8,239	214,679	257,955	178,519	209,937	4,893	6,439	183,412	216,376
Less: Offsetting reports					−619	−486					−612	−476
Grand total—DOD					214,060	257,469					182,800	215,900

INTRODUCTION OF WITNESS

Senator **Schmitt**. With that, Dr. Borsting, we would ask you to proceed with a summary of your prepared statement. The full statement will be printed in the record following your remarks.

Please introduce those of your colleagues with you that will be participating.

I might say that I find it personally unfortunate that we continually have to deal with supplementals. I would think it would be clearer to the American people and clearer to the Congress if we dealt with a budget up front rather than saying that we have saved some money in the fall and then bringing it back before us again in the form of a supplemental.

It is not just a criticism to the Congress in handling the defense budget, it is a criticism of the Congress handling of all the budgets. Several billion dollars in the Health, Human Services and Education budget have been handled the same way. It is totally unrealistic and makes some of the statements and actions of the fall a bit of a charade.

Senator Rudman or Senator Kasten, do you have a statement?

Senator **Rudman**. No.

Senator **Kasten**. No.

Senator **Schmitt**. Mr. Secretary.

INTRODUCTION OF ASSOCIATES

Dr. **Borsting**. Thank you, Mr. Chairman.

What I would like to do is just summarize a few remarks from my prepared statement, but, first, let me introduce some people here.

Deputy Assistant Secretary Clyde Glaister, who is my chief deputy for the budget is sitting next to me.

In back are the three service budget officers or their representatives, Admiral Miller from the Navy, Mr. Umphrey is representing the Air Force, and General DeLaune is from the Army.

MANAGEMENT INITIATIVES

Let me first just mention a few things about some of the management initiatives that we have accomplished I think in the past year. I won't go into detail. They are in my statement.

The planning, programing, and budgeting system has been really completely revised. I think we have put some planning into the first "P" of the PPB system gone through this last fall and taking the service requirements and bringing in the commanders from the various CINC's and getting their input.

This budget, in my view, and I have been associated with Defense for over 25 years, has more planning in it on the PPB system than any other budget that I have been in contact with.

Also, we revised the paperwork of the planning, programing, and budgeting system and cut it about in half, which I think has made a better process. We have been able to concentrate on more important issues. The service secretaries being members of the Defense Resources Board I think has been an excellent change because they are participating in the essential decisions of the Defense Resources Board that Secretary Carlucci chairs.

LIST OF EFFICIENCY RECOMMENDATIONS

Senator SCHMITT. Mr. Secretary, let me just interrupt. Last year Mr. Carlucci presented the subcommittee with a list of items that he was recommending and others were recommending as a means to increase procurement efficiency, design efficiency, and so forth.

Could you supply for our record that list again in outline form and in a side-by-side column the progress we have made on each of those initiatives?

Dr. BORSTING. Yes, I will. In fact you just anticipated my next few remarks.

Senator SCHMITT. Well, go ahead, but if you will give us as much as you can for the record in an outline form and not narrative.

Dr. BORSTING. Yes, I will give you a complete list.

[The information follows:]

PROGRESS REPORT ON 32 CARLUCCI INITIATIVES

DEPARTMENT OF DEFENSE ACQUISITION IMPROVEMENT PROGRAM

Initiative and Status

1. Management Principles—Widely disseminated and emphasized.
2. Pre-Planned Product Improvement—Included in Defense Guidance and in Program Preparation Instructions.
3. Multiyear Procurement—Candidate programs before Congress.
4. Program Stability—Requires strong Congressional support.
5. Encourage Capital Investment to Enhance Productivity—Some goals achieved; more to come.
6. Budget to Most Likely Cost—Specific improvements in current Budget on cost realism.
7. Economic Production Rates—In effect on sixteen programs.
8. Assure Appropriate Contract Type—Requires continued emphasis.
9. Improve Support and Readiness—Service implementation underway.
10. Reduce the Administrative Cost and Time to Procure Items—Some goal achieved; contract simplifcation effort underway.
11. Budget Funds for Technological Risk—New concept being applied in Services.
12. Provide Adequate Front-end Funding for Test Hardware—Requires continued emphasis on attitudes.
13. Governmental Legislation Related to Acquisition—Several already approved; requires continued Congressional support.
14. Reduce the Number of DoD Directives—Same cancelled; more under review.
15. Funding Flexibility—Requires strong Congressional support.
16. Contractor Incentives to Improve Reliability and Support—Guidelines disseminated; senior level working group established.
17. Decrease DSARC Briefing and Data Requirements—Done in DODD 5000.1 and DoDI 5000.2.
18. Budgeting for Inflation—Favorable decision by OMB and President.
19. Forecasting of Business Base Conditions at Major Defense Plants—First forecasts due to CAIG shortly.
20. Improve the Source Selection Process—In process through Working Group.
21. Develop and Use Standard Operational and Support Systems—Working Group determining specific implementation actions.
22. Design-to-Cost Contract Incentives—First required directives issued; more to come.
23. Implementation of DoD Acquisition Program—Well underway.
24. Decision Milestones—Done with issue of DoDD 5000.1.
25. Mission Element Need Statement in the POM—Defense Guidance out; DoDI 5000.2 will be out shortly.
26. DSARC Membership—Done.
27. Acquisition Executive—Done.

28. What Should be the Criterion for Systems Reviewed by DSARC?—Done.

29. How Should the DSARC/PPBS Decision Be Integrated?—Well underway with first Administration Budget submission.

30. Program Manager Control Over Logistics and Support Resources—Trial budget review completed. Evaluation report out for comment.

31. Improve Reliability and Support—Integrated with Initiative No. 9; underway.

32. Increase Competition—Service plans submitted and under review.

CARLUCCI INITIATIVES

Dr. Borsting. I was just going to summarize some of the major items that are in the budget of the so-called Carlucci initiatives, the over 32 initiatives that Frank Carlucci and the Secretary about a year ago, I guess, started in the Defense Department.

One of them was budget to most likely cost. We have added about $1.98 billion in this budget working with the services to make sure that we have budgeted to the most likely costs of the weapon systems. We feel in the past that systems have been underbudgeted.

MULTIYEAR PROCUREMENT

Secondly, multiyear procurement. In this budget you will see 14 different systems that are proposed for multiyear procurement. That will add about $550 million in obligation authority or budget authority to the budget for up-front funding. But we also feel that over a 5-year period this will save over $800 million.

Senator Schmitt. You are still though playing catchup there, right? We are going into multiyear procurement on systems that are already in production rather than having that built into the initial contract?

Dr. Borsting. Well, one of our criterion I think has been that you do multiyear only on a pretty stable program, stable in the sense that there won't be very many design changes and also stable in that we want to make sure that we will need these over the next 3 or 4 years.

For example, one of the multiyear procurements that the Congress passed last year was the F-16. Your committee, the authorization committees and the House Appropriations Committee approved the multiyear procurement of the F-16. It is a very stable system at this stage and I think it was an excellent candidate for multiyear.

Senator Schmitt. Yes, but if you do it that way without incentives to improve and freeze design earlier, then you are only gaining 10 or 12 percent on the cost of the weapons systems, whereas if you start the program on multiyear procurement you would gain 20 or 30 percent.

Dr. Borsting. It is a tradeoff.

Senator Schmitt. The problem is, and I am sorry to interrupt at this point, but we, the governing party right now, are saddled with some very large margin design and procurement efforts of the past. If you are going to have a main battle tank you buy the M-1 or if you are going to have an Army attack helicopter you buy the AH-64, even though we all know that there were major design and procurement problems that should have been handled many, many years ago.

Now are we doing anything to clean up the front end of the pipeline so in fact we could consider multiyear procurement at the time the final production contract is signed?

Dr. Borsting. Yes. I think one of the Carlucci initiatives would go in conjunction with this. That is one to not push the state of technology too much in the procurement of initial weapons and have an evolutionary development so that maybe at the early stages you could have a multiyear contract and then you would improve it as you went on in an evolutionary way.

Senator Schmitt. By model changes.

Dr. Borsting. Model changes, correct. I think when we get that implemented we will then have a way to do multiyear earlier in the procurement process.

PRODUCT IMPROVEMENT

Senator Schmitt. Well, when can we expect to start to see new weapons systems designed on that framework basis, and by framework I mean you build an airframe or a tank frame or something that has built-in flexibility for the future.

Dr. Borsting. Some of the new systems are just being started right now, and I could supply some of those for the record.

Senator Schmitt. I hope you will, because obviously you are under fire, the DOD is under fire right now for problems that you didn't create, but you are going to have to live with if we are going to procure weapon systems to improve readiness.

Dr. Borsting. That is correct.

[The information follows.]

Preplanned Product Improvement

The F-16 multinational staged improvement program is a current example of the pre-planned product improvement initiative. Improvements will be introduced into the F-16 aircraft at approximately the mid point of production. Other examples are:

Joint Tactical Information Distribution System (JTIDS)—Navy has frozen a baseline configuration and will not allow addition of new capability to be added during engineering development. Any additional capabilities will only be considered as a part of a future block change.

Fighting Vehicles System (FVS)—Army will hold off an incorporation of modification to fire control for TOW-2 missile and nuclear/chemical hardening until a block change is approved.

M-1 Tank—all modifications such as 12mm gun will be planned for a simultaneous introduction into production line to avoid the inefficiencies of making several separate production line changes.

A large list of candidates p^3I programs are now under review and will be selectively included in the fiscal year 1984-88 program review process this year.

REALISTIC PRICING

Dr. Borsting. The next item that I want to mention about the Carlucci initiatives were economical production rates. We have added about $2.7 billion for economic production rates to the budget will result in about 5-year savings of about $2.3 billion.

Also, we have realistically priced a lot of systems again going back to the inflation rates, and this is a comment that I would like to dwell on a bit.

All administrations I think have been criticized in the past for not estimating inflation properly. There is a significant change in this budget in the way we estimate inflation. As I have indicated in my statement, we have priced four commodities differently than the GNP deflator. Here is how we have priced them.

We have taken the Bureau of Economic Analysis data on defense systems, they have data from the past, used the administration's economic scenario for the future and priced these four commodities which are track vehicles, aircraft, ships, and missiles in nine procurement accounts.

Senator SCHMITT. Could you not use the word "commodity"?

Dr. BORSTING. We started using the word "commodity" and maybe it is a mistake.

Senator SCHMITT. Commodity should be a more basic raw material or a processed material.

Dr. BORSTING. One thing is we didn't want to use the word "system" because we are not having a different index for all elements of the system. We are having a different index for the tanks and the missiles.

Senator SCHMITT. It is a word game, but I really think you are going to spend a lot more time explaining what you mean by commodity than you are if you figured out a better word right now. I don't care whether you use system or not.

Dr. BORSTING. We have to think of a different word because it is not the entire system. Maybe a major component of a system would be a better phrase.

Anyway, these four types of procurement have been priced differently. They have added approximately $2.2 billion to the 1983 budget and about $39 billion to the 5-year defense plan. It is higher than if we had priced the items according to the standard GNP purchase deflator.

Those are just some of the ones for the Carlucci efficiencies, economies and savings. We have in this budget about $7.4 billion of savings we have taken already and $4 billion in terms of pay, and these are general pay caps of the administration, including military and civilian pay, acquisition savings of about $2.4 billion and another billion in operations savings.

The $2.4 billion savings corresponds to some of the savings of the total package of acquisition initiatives that we will detail to you for the record.

The operations include a considerable amount of savings in travel limitations, also cuts in consultant budgets and things of that nature.

[The prepared statement of Assistant Secretary of Defense Borsting follows:]

PREPARED STATEMENT OF JACK R. BORSTING

ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

Mr. Chairman and members of the committee:

I. Introduction

The President's National Security goals established early last year remain firm. Success in achieving those goals is essential to this Nation's future survival, both militarily and economically. Defense resource needs expressed in this budget for FY 1983, as this committee has been made fully aware, are large. Also, this Defense budget request is being expressed against an economic background at this time that suggests fiscal constraint and reduction because of large federal deficits and uncertainty in our financial markets.

The military challenge we face and how we respond to it should not be based on the current state of the economy because within a short time the economy may return to a period of sustained growth. Therefore, it would be costly for us to decide on future defense needs based on current short term economic uncertainty. Achieving adequate military capability for the United States is a long-term need and cannot and should not be decided based on near-term economic conditions.

My purpose today, Mr. Chairman, is to provide background on the Defense budget and to consider with this committee, those programs that are specifically requested in the FY 1983 Department of Defense Appropriations Act.

The defense budget for FY 1983, as we are all quite aware, is large and represents a TOA increase in real terms of 13.2 percent; however, translated into actual spending the increase is 10.5 percent. Why? This year, as the Secretary of Defense and others have stated, some changes in managerial precepts have occurred. This budget attempts to identify to the best of our ability, the full cost of the President's defense program. We are, of course, not so imprudent as to say we can state with absolute certainty what the exact cost of this program will be, but we have made a concerted effort to honestly state up-front what we reasonably expect those costs will be.

Some programs are recommended for full funding in FY 1983 that might have, under different approaches, been requested for funding in later years, but undoubtedly at higher costs. We are also attempting to get more economic production rates, that is, lower unit costs from what would otherwise be the case. Another innovation, most recently recommended by the Joint Economic Committee (JEC), has been incorporated in this budget: that is to budget more candidly for the effects of inflation on our major procurement systems.

We fully recognize the added burdens and responsibilities this budget and its justification bring to this Department. Every effort possible must be made throughout the Department of Defense and the military establishment to see that these funds are used efficiently and for the purposes the Congress intends. Economies and efficiencies have been identified and achieved. We recognize that even more are needed and are continuing our review in an aggressive and comprehensive manner. Efforts to uncover waste and improper management of funds are being pursued throughout the program, budget and financial communities so that the new Special Assistant for Review and Oversight may take appropriate action. These actions may and should, if appropriate, include prosecution. Also, the Cabinet Council on Integrity and Efficiency of Government has been supplemented by our own internal Council which has developed a vigorous program, to insure active participation.

Without such efforts as these, the public's perception of the defense budget and the need for added resources could erode. That would be indeed unfortunate, perhaps disastrous. We recognize this awesome responsibility and will make every possible effort to achieve the efficient use of the public's funds.

II. Management Initiatives

A major objective of this Administration has been, and continues to be, improving the management of the Department of Defense. Last February Deputy Secretary Carlucci directed a reassessment of the Planning, Programing, and Budgeting System and in early March of the acquisition process. The FY 1983 Defense budget fully reflects the effect of changes brought about as a result of these reassessments.

Decision-making Procedures

The PPBS was changed to broaden the role and membership of the Defense Resources Board (DRB) and to establish a more decentralized policy execution, while strengthening the system of centralized control of executive policy direction. The DRB membership now includes the Service Secretaries and its role has been broadened to assist the Secretary of Defense with management of the entire PPBS. These changes have led to a quicker and more accurate flow o essential information among and between the Department's top executives and thus, to better coordination and accountability of resource decisions.

The role of careful, thorough planning was recognized as vital and that phase of the PPBS has been greatly strengthened. As a result, the Defense programs will be more stable, better thought out, and will consistently support a long-range Defense concept. Although the complete product of this improved planning phase is the guidance to the components for the currently on-going programing phase, managers have been able to look at two years simultaneously rather than just one year in isolation. That two year perspective is in keeping with the deliberate emphasis on front-end planning, which ensures programs and budgets are guided toward the goals and objectives of strategic plans. The planning process is designed to stress wide-vision, forward-looking planning for the future, rather than being status quo oriented relying on incremental changes to existing programs.

The planning phase began in September with a series of consultations during which the Commanders of the Unified and Specified Commands provided personal recommendations to the Secretary concerning program guidance. Those consultations were the first time these Commanders had been formally consulted on guidance for programs. In addition, the revised planning process provided, for the first time, a Joint Chiefs of Staff involvement in development of a resource constrained planning guidance and also, provided the Service Secretaries an institutionalized role in advising on strategy and policy issues. As a result of these changes, the Secretary's access to informed, current policy and strategy advice has been substantially better than that available to his predecessors. Because of these changes, the Defense Guidance that is to be published this month will be considerably improved over those published in prior years. We therefore expect the program review this spring and summer to result in a smoother integration of program and budget next fall with consequent and long-term benefits in capability.

Acquisition Reforms

The management initiatives included acquisition reforms which have substantially impacted this budget. Chief among these are the careful attention give to budgeting most likely cost and the application of multiyear procurement contracting.

The Secretary has insisted that program managers be more realistic in initially estimating their costs. We carefully reviewed these estimates for major systems to assure, to the extent possible, that those estimates were realistic. It is not surprising that program managers occasionally take an optimistic view of schedule or technological uncertainties. They, after all, are immersed in the program and striving to the utmost to achieve an optimum combination of product and cost. However, it is our responsibility in the review process to temper that dedicated optimism with an objective assessment of most probable outcomes. We must make major improvements to minimize the number and size of future cost overruns. This budget reflects reforms to do just that. But it should be clearly understood that the Congress has not seen the last cost overrun. For example, prior year unbudgeted inflation must be dealt with. The following table illustrates the kinds of additions that were made as one attempt to resolve this very troublesome problem.

BUDGET TO MOST LIKELY COST
($ in Millions)

	FY 1983 TOA Increase
AH-64 Attack Helicopters	210.0
UH-60 Helicopters	40.0
STINGER Missiles	30.0
PATRIOT Missiles	127.0
TOW Missiles	45.0
PERSHING Missiles	32.0
M-1 Tanks	310.0
F-14 Aircraft	60.0
F-18 Aircraft	250.0
CH-53E Helicopters	40.0
SH-60B Helicopters	104.0
P-3C Aircraft	16.0
E-2C Aircraft	89.0
SPARROW Missiles	32.0
PHOENIX Missiles	106.0
HARPOON Missiles	44.0
HARM Missiles	41.0
STANDARD Missiles	64.0
F-15 Aircraft	84.0
F-16 Aircraft	181.0
ALCM Missiles	25.0
GLCM Missiles	50.0
	1,980.0

NOTE: These increases compare January 1981 estimates as expressed in the P-1 with January 1982 estimates and are exclusive of changes in quantities. Also excluded are the costs of multiyear procurement and economic buy "up-front" costs. They are representative of the significant increase that was necessary in FY 1983 just to realistically buy the quantities planned last year. Many millions more were added to the less glamourous items of the "Other Procurement" accounts.

Multiyear procurement contracting was introduced last year with the F-16 aircraft, the AN/TRC-170 radio, and the C-2 aircraft. The FY 1983 budget includes TOA for multiyear procurement of 14 systems. Altogether, this year's investment of $545.9 million in TOA will produce five-year net savings of $805.5 million, a very respectable return. In addition to these 14 systems, we have initiated actions to assure the UH-60A BLACKHAWK helicopter program is realigned as a multiyear procurement contract. The FY 1983 budget is structured to provide a multiyear procurement start for the BLACKHAWK, but in addition, in keeping with guidance in the FY 1982 Appropriations Act, we have submitted a reprograming request which would enable us to initiate that multiyear start in FY 1982. By reprograming $34.9 million from Ammunition Procurement, Army and using other funds available within the BLACKHAWK program, we will be able to fund the termination liability value of the economic order quantity and initiate a BLACKHAWK multiyear procurement this year. I urge your expeditious approval of that reprograming request.

In addition to the above two initiatives, we have moved to procure our systems at more economic production rates. As you know, the benefits of moder production technology are not exploited at lower production rates because plan overhead, technical skills, and tooling are not fully utilized. The failure t properly treat this inevitable economic fact has adversely impacted prior Defense programs. That adverse impact extends beyond cost, to an inability to field adequate numbers of new systems on a militarily effective schedule. The requirements for economic production rates, and their benefits, became abundantly clear in the acquisition review I mentioned earlier. As a result, rather than producing many systems in what typically turns out to be too-small quantities, this budget provides special support for economic production rates. For example, TOA and quantity increases for the systems on the following chart have been provided to significantly improve economic production rates. As the chart shows, an investment of $2.8 billion is required in FY 1983 to achieve these higher production rates. Conversely, the higher rate allows us to procure the previously planned five-year quantities at a savings of $2.3 billion.

ECONOMIC PRODUCTION RATES
($ in Millions)

	FY 1983 TOA Increase	Net 5-Year Savings
AIM-9M Missiles	-	74.2
E-3A Aircraft	-	159.0
F-15 Aircraft	662.9	42.6
RF-4 IR Sensors	19.3	13.1
Defense Satellites	207.2	64.0
AN/SQQ-17 Sonobuoys	-	3.2
AN/BQQ-5 Sonars	-	1.3
TSEC/KG-45	2.8	.8
SH-60B Helicopters	55.7	217.5
CH-53E Helicopters	81.8	20.9
Common ECM Equipment	61.7	18.5
A-6E Aircraft	109.6	58.4
EA-6B Aircraft	169.6	36.8
F-14 Aircraft	562.5	70.9
F-16 Aircraft	219.8	747.0
Laser HELLFIRE Missiles	130.0	189.8
Fighting Vehicle Systems	141.3	236.0
DIVAD Gun Systems	349.0	313.1
	2,773.2	2,267.1

NOTE: Includes only the incremental cost of the FY 1983 quantities that were added to the previously planned buy in order to attain the beneficial economies shown in the "Savings" column.

It should be clearly understood that the planned savings accruing from multiyear contracting and economic production increases will only be made possible by bringing forward into FY 1983 TOA from subsequent years.

Realistic Pricing

Efforts to fully and honestly price the budget program extend beyond the initiative to budget to most likely cost. In addition, we have received for the first time authority to estimate inflation differently in the major commodity accounts than in the rest of the budget. It has been clear to us for some time that aircraft, missiles, ships and other sophisticated weapons which utilize advanced materials and technology experience higher price inflation than is experienced in the overall economy. As this committee well knows, we have experienced cost overruns in prior year programs because of having underestimated inflation in our preparation of TOA requests under the full funding concept. The FY 1983 budget incorporates, for the major commodity appropriations, projected inflation rates that are, on average, about two percentage points higher than the GNP average. Their effect is to increase FY 1983 TOA by $2.2 billion and FY 1983-1987 TOA by approximately $39 billion.

I want to again emphasize that the full and honest pricing of the budget surely will reduce cost overruns, although it would be unrealistic to expect cost overruns to be completely eliminated. The effort to budget to most likely cost and the use of the higher commodity inflation rates will enhance the integrity and validity of the Selected Acquisition Reports (SARs); however, because these are increases, they also will cause reported costs to rise and thus will contribute to threshold breaches under the Nunn Amendment.

With respect to the Nunn Amendment, we are concerned that the provisions of that Amendment could lead to program stoppages or terminations which would increase ultimate costs, because of time lags in obtaining authorization to restart production. In addition, the Amendment tends to establish notification and authority lines different than those by which the DoD is managed and we are concerned for the eventual effects of such an action. In addition, I do not feel that the measurement of cost growth in the amendment tells the real nature of the problem since additional quantities and different inflation projections may cause breaches. However, I am sure that working with the committees we can resolve these issues in a way that will provide the Congress its required information while alleviating our concerns.

Economies and Savings

The management initiatives have included special efforts to achieve savings through actions that result in economies and efficiencies. Clearly, multiyear procurements and economic production rates are such actions, but they by no means exhaust our efforts. It is relatively easy to achieve savings once in any administration or tenure of office; however, assuring a continuation of those changes is much more difficult. Therefore, in the discussion of economies and efficiencies, it is important to understand that organizational and procedural changes have been made which were carefully designed to create a recurring pressure for continued savings. Specifically, an Assistant to the Secretary for Review and Oversight, a Council on Integrity and Management Improvement, and the Secretary's personal Performance Reviews have been instituted. These initiatives provide a vehicle for concerted efforts in the fight against waste, fraud, and abuse. The Secretary's personal Performance Reviews serve especially well to focus management attention, identify existing and potential problems, and to encourage accountability, while allowing decentralized execution.

The FY 1983 budget is approximately $7.4 billion less than it would have been without the benefit of these economies and efficiencies. The following table is a summary of the savings already achieved or specifically programed.

TOA ($ Billions)

	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY Subtotal	FY 1987	FY Total
Pay Adjustment	.1	2.1	4.0	5.1	5.9	6.5	23.7	7.1	30.8
Acquisition	.2	1.3	2.4	2.8	2.1	3.3	12.1	1.7	13.8
Operations	.3	.9	1.0	1.1	1.1	1.2	5.6	1.3	6.9
Total	.5	4.3	7.4	9.0	9.1	11.0	41.4	10.1	51.5

The compensation savings include: (1) a continued cap on Civil Service pay increases at 5%, a lesser amount than would result from full application of comparability surveys; (2) once a year, rather than semi-annual, cost of living increases; and (3) reversal of the previous Administration's proposed military retirement system reforms that would have cost more in the near-term to realize some long-term economies. The FY 1983 savings in this category are $4 billion and the savings through FY 1986 are up approximately $6.6 billion from the $17.1 billion savings projected last March by this Administration.

The acquisition savings, up $4.7 billion through FY 1986 since last March, result primarily from successful application of many of the 32 acquisition initiatives directed by Deputy Secretary Carlucci. Some of those initiatives producing major savings are: (1) multiyear procurement--$125 million in FY 1983 and $1.1 billion through FY 1987; (2) economic production rates--$568 million in FY 1983 and $2.3 billion through FY 1987; (3) productivity improvements from investments in new capital equipment-- $60 million in FY 1983 and $324 million through FY 1987; and (4) procurement of lower cost systems-- $69 million in FY 1983 and $1.4 billion through FY 1987.

As a result of these improvements, economies, and efficiencies, the FY 1983 Defense budget is a much more cost efficient budget than you have reviewed in prior years. Our intent has been to get the maximum amount of Defense capability per dollar, thus presenting you a minimum budget, given the required capabilities and force levels.

III. Defense Budget

Financial Summary

The FY 1983 Defense budget request is $258.0 billion in Total Obligational Authority (TOA). This represents a $43.7 billion increase over FY 1982 estimates. Approximately one-third of the increase is required to cover inflation; one-third will go for more efficient up-front funding; and one-third for other program initiatives. Table 1 provides a DoD financial summary for FY 1981-FY 1983.

Inflation

The portion of the budget allocated to inflation really buys us nothing extra. Pay and price increases are simply a prerequisite for everything we must do. Over the past ten years, inflation projections reflected in DoD budget estimates have been low, and defense acquisitions which are based on full funding, have been underpriced and consequently suffered greatly. Pricing the FY 1983 defense budget and its five-year program is now based more directly on economic events affecting those industries actually providing military goods and services. The acquisition programs are budgeted to most likely cost; thus the Congress and others can see in advance what the likely, fully funded costs will be based on appropriate inflation expectations for several years in the future. Costs of modernization have not been deliberately underestimated in this budget to make desired programs appear affordable. The revised procedure for projecting inflation is a cornerstone in the sweeping reform of defense management initiatives undertaken by DoD this year.

The following table provides a display of both pay and price projections included in the FY 1983 budget and the outyear forecast.

DoD Inflation Rates
Outlays

FY	Composite DoD	Pay	Purchases				
			Fuel	Major Commodities	Other Purchases	DoD Total	GNP
1979	7.5	6.3	15.6	8.8	8.8	9.1	8.6
1980	11.3	8.0	80.6	9.7	9.7	14.9	8.6
1981	12.9	13.1	18.4	11.9	11.9	12.6	9.4
1982	8.8	9.3	1.2	9.6	9.2	8.3	8.2
1983	6.9	6.7	2.1	8.5	7.0	7.0	6.5
1984	5.9	5.9	5.5	7.3	5.1	5.9	5.1
1985	5.5	4.8	5.8	7.5	4.7	5.9	4.8
1986	5.1	4.5	5.7	6.5	4.5	5.4	4.6
1987	5.0	4.5	5.6	6.5	4.4	5.3	4.5

Up-front Funding

Earlier I mentioned another important feature of the FY 1983 Defense budget; that a higher initial investment in programs is made up-front in order to ensure real unit cost savings in the future. Piecemeal procurement through renegotiation of contracts each year for long-term equipment orders contributes to instability in the defense industry and results in certain higher prices. Firm commitments for several years of purchases with up-front funds to defense contractors will facilitate savings through large-lot buying and get production lines moving quickly and efficiently. We estimate that by investing $546 million for advance funding this year, $806 million net savings will be passed on to the government by contractors. The new contracting system will provide the contractor with the capital to improve facilities and equipment, thereby increasing the defense industrial base. The following table provides a summary of the FY 1983 budget increases associated with acquisition initiatives:

SUMMARY OF FY 1983 TOA BUDGET INCREASES ASSOCIATED WITH ACQUISITION INITIATIVES
($ in Millions)

o Multiyear Procurement Programs	546
o Economic Production Rates	2,773
o Budget to Most Likely Cost	1,980
o Productivity Investment	121
o Front-End Funding for Test Hardware	96
o Budgeting for Technological Risk	87
o "New Start" Programs	382
o Acceleration of procurement of 2 CVNs*	6,795
	12,780

*The SecDef decision to procure 2 CVN nuclear aircraft carriers fully funded in FY 1983 vice the traditional method of ordering them one every two to three years will result in a savings of $754 million.

Program Initiatives

Real program growth is planned across the board with most of the buildup occurring in the investment sector. These increases are necessary to preserve an adequate balance of military capability for the future as well as overcoming some of the shortcomings of past years.

From FY 1967 through FY 1980, the cumulative real decline in DoD investment was more than 30 percent. The planned expansion in our military capability in the mid to late 1970's never materialized largely because of underpricing. For example, for the four years from FY 1978 to FY 1981, the estimated impact of underpricing is conservatively estimated at $38 billion in Total Obligational Authority. Also the planned buildups, from the outset, were not ambitious enough to make up prior year losses.

Table 2 illustrates the funding requirements had we followed a modest 3 percent growth rate in DoD investment from FY 1964.

The shaded area between the 3 percent growth line and our actual performance in investment represents about $725 billion. The currently planned buildup would begin to recoup some of those losses in FY 1985, and make up about $40 billion by FY 1987.

One should look at the FY 1983 budget as the first installment on this five-year program designed to assist the President in his goals of rearming America and restoring dignity and some measure of equity in wearing the American military uniform.

The DoD Topline for the four-year period beginning in FY 1983 provides for average annual growth of 7.5 percent in Total Obligational Authority (TOA), and about 8.1 percent in Outlays. The long-range forecast and the underlying pay/price assumptions are provided in Table 3.

DoD as Percentage of GNP

The five-year projection of DoD Outlays will average 6.8 percent of the GNP increasing from 6.3 percent in FY 1983 to 7.2 percent in FY 1987. The cumulative increase over the FY 1983 level is approximately $140 billion. The real increase, after adjustment for inflation, is only half or about $70 billion in FY 1983 dollars.

In a historical perspective, 7.2 percent of GNP does not appear excessive. In 1945, at the end of World War II, DoD Outlays were 35.3 percent of GNP; in 1946, they declined to 19.9 percent and by 1950, were 4.4 percent of GNP, averaging 4.6 percent for the years 1947 to 1950. The peak Korean War percentage of 12.2 percent was reached in 1953. From 1956 to 1964 - all peacetime years - the DoD Outlays ranged between 8.0 percent to 8.6 percent.

In 1968, during the height of the Vietnam involvement, DoD Outlays reached 9.3 percent of GNP, the highest since the Korean War era. DoD Outlays dropped to 8.5 percent of GNP by 1969 and by 1979 had declined to 4.8 percent, the lowest DoD percentage of GNP in 29 years.

The decline was reversed in 1980 with outlays reaching 5.1 percent of GNP and we expect that by 1987, DoD outlays will be approximately 7.2 percent of GNP. The following table provides a summary of DoD expenditures as a percentage of GNP and total federal outlays from FY 1964-87.

DoD as Percentage of Federal Outlays and GNP

FY	DoD as % of Federal Outlays	DoD as % of GNP
1964	41.7	8.0
1965	38.7	7.0
1966	40.2	7.5
1967	42.6	8.7
1968	43.2	9.3
1969	42.1	8.6
1970	39.2	8.0
1971	35.2	7.3
1972	32.4	6.7
1973	29.6	5.9
1974	28.8	5.7
1975	26.0	5.8
1976	24.0	5.4
1977	23.7	5.2
1978	22.9	5.0
1979	23.3	5.0
1980	22.9	5.2
1981	23.8	5.5
1982	25.2	5.9
1983	28.5	6.3
1984	30.6	6.5
1985	32.9	6.9
1986	35.0	7.1
1987	36.4	7.2

Impact of Defense Budget on U.S. Economy

There is a great deal of concern that the vital steps required to improve the state of our national defense will, in the process, destroy the state of the economy by increasing inflationary pressures, causing bottlenecks in industry, and competing with the private sector for a shortage of skilled manpower. We believe these concerns are exaggerated, and that no serious bottleneck problems are likely to arise in connection with the defense buildup. The nature of this buildup is sufficiently different from prior buildups--largely associated with war--so that the U.S. economy will be able to absorb this Defense buildup without major disruption and upheaval. Moreover, we are sharing with industry in advance our forecast demands for materiel, so that investment can begin in any additional capacity that might be needed.

The Department of Defense recognizes the importance of increased private investment to the success of the President's economic recovery program and to our major acquisition initiatives as well. We believe the defense buildup is a positive reinforcement, not a negative tradeoff, to these investment goals.

During the past year, we have collected substantial evidence showing that the economy can accommodate the defense buildup without serious harm, and have looked carefully into these areas where special steps may be required. OSD staff economists have accomplished several analyses using leading models of the U.S. economy; examined defense related and civilian demand on a number of specific industries; and made projections in the area of strategic materials and certain categories of skilled labor. All of our analyses indicate that the defense buildup is necessary and affordable.

Employment Levels

DoD impacts employment both directly by established strength levels for the DoD civilian workforce and military personnel, and indirectly through industry related employment resulting from Defense expenditures. In FY 1983, an increase of 56,000 is planned for military end strength and 1,700 for the civilian workforce. It is now estimated that between 25,000 to 30,000 defense related jobs could be generated in the private sector for each billion dollars of DoD expenditure. On this basis, increased Defense spending in FY 1983 will generate approximately 347,000 additional jobs in the private sector. Current indications are that the private sector will be able to absorb this increased demand over the long-run without causing severe shortages in any sector.

Total Defense manpower including industry related employment, is expected to increase by about 880,000 from FY 1983 to FY 1987. The composition of these increases is shown in Table 4.

Summary by Appropriation Act

The Department of Defense budget totals for FY 1983 are $257.5 billion in Budget Authority and $215.9 billion in Outlays. In general, these amounts can be presented in three broad categories; (1) submitted for Congressional action at this time; (2) contingent amounts to be requested at a later time; and (3) offsetting receipts. The largest item by far is the Defense Appropriation Act which accounts for about 97 percent of total budget authority. The Military Construction/Family Housing Act accounts for the remainder of the DoD request. The following table provides a breakdown of the three broad categories by Act:

FY 1983 Department of Defense Budget
Scheduling of Budget Requests
(Budget Authority, $ in Millions)

	DoD Appropriation Act	Military Construction/ Family Housing Act	Grand Total DoD
January 1982 Appropriation (Budget Authority) Request -------	245,516	8,213	253,729
Contingency for Later Submission:			
October 1, 1982 Civilian and Military Pay Raises ------------	3,799	12	3,811
FY 1983 Wage Board Increases -----	274	4	278
Proposed Legislation -------------	137	-	137
Subtotal Contingency ----------	4,210	16	4,226
Total FY 1983 Budget Estimate ------	249,726	8,229	257,955
Less: Offsetting Receipts ---------			-486
Total FY 1983 DoD - Budget Authority			257,469

TOTALS MAY NOT ADD DUE TO ROUNDING

IV. FY 1982 Supplemental Proposals

FY 1982 Program Supplemental

Our $2.3 billion supplemental for FY 1982 will provide for a wide range of diversified programs, all of which will maintain or achieve stability of Defense programs originally planned and approved by the Congress. As you know, this Administration has stated that where planned Defense programs were jeopardized by higher than anticipated inflation.

we would request additional supplementals to preclude further erosion of resources from other programs. While we cannot retroactively restore all of the programs that have been impacted by the FY 1981 actual inflation, we are endeavoring to support on-going FY 1982 programs that are directly or indirectly impacted by inflationary trends, as well as those programs which might have been initiated had our resources remained intact.

We have identified the program supplemental in five basic categories as follows: (1) direct result of inflation, $520 million; (2) indirect result of inflation, $803 million; (3) transfers from other government agencies, $75 million; (4) programs which oversight committees have suggested be submitted as supplemental or reprograming actions, $583 million; and (5) new initiatives, $333 million.

About 23 percent, or $520 million of our request, which directly results from inflation will provide for increased utility costs, postal rate increases, increases in the government's share of health benefits, increased economic assumptions concerning CPI adjustments for retired personnel, and increased costs associated with the military personnel accounts which were not known prior to submission of the revised FY 1982 estimates.

An additional 35 percent, or $803 million, has been impacted indirectly by inflation. These funds support management improvements of various programs financed by the military personnel appropriations which were cited by the Congress in their review of 1982 programs. Such savings/improvements cannot be achieved without substantial reductions to manpower programs approved by the Congress. Additional fact-of-life increases, such as new Variable Housing Allowance (VHA) rates, also are being experienced in these accounts. We are striving to continue to reduce our real property maintenance backlogs, which have grown to $3.9 billion DoD-wide. The deterioration that has taken place over the years has been of great concern to the Secretary of Defense, as well as to the Congress. Such activities could not previously be done without detriment to other on-going programs. The increased fuel inventory buildup will preclude a drain on war reserve stocks while taking advantage of a significant savings of fuel costs. However, we will continue to closely monitor prices to see if they might fall still further. Naturally, in that event it would be prudent to delay purchases to some extent, but not to a point of incurring risk. To the extent that peacetime fuel inventories are not maintained, the war reserve stocks are drawn upon which ultimately degrades our readiness posture.

At this point, I have identified $1.3 billion of our requirements which are directly or indirectly impacted by inflationary trends. These programs account for more than 50 percent of our total program supplemental request of $2.3 billion.

Functions which were transferred from other government agencies amount to $75 million and represent increased costs to Defense which were not known in sufficient time to include in either the original FY 1982 budget or our September revision of the FY 1982 budget request. These include funding for Section 6 schools transferred from the Department of Education and budgeting for unemployment compensation which had previously been funded by the Department of Labor.

Another 25 percent of the total request, or $583 million, is for programs which, during the course of the FY 1982 Congressional budget actions, several oversight committees have suggested for supplemental or reprograming action. In this area are a number of improvements in military compensation and entitlement programs which were approved in the Uniform Services Pay Act of 1981, but not financed. Again, in absence of supplemental amounts, we cannot effect the desired improvements without curtailing other military programs that are vital to maintaining the level of compensation for our military members that this Administration and the Congress have established. The Ras Banas, Egypt construction will provide the initial increment to upgrade RDF. support facilities and upon completion, Ras Banas will become the main staging facility for the Southwest Asia area. The KC-10 and C-5 aircraft will form part of a program which will meet lift requirements identified in a Mobility Force Airlift study that was mandated by Congress. The KC-10's will be procured at advantageous contract prices and are followed by additional buys in FY 1983 through FY 1987.

Lastly, some 14 percent, or $333 million, is for new initiatives. These programs present an opportunity to take advantage of increased development and production capabilities that would otherwise be delayed or lost to us in the long run. For example, $57 million is included to immediately proceed with full-scale development of the Advanced Ballistic Reentry Vehicle (ABRV) in order to meet the current MX Initial Operating Capability (IOC) schedule. An investment of $126 million will allow the Department to increase FY 1982 production of various components of the turbine engine and fire control system for the M-1 tank. The M-1 tank "surge" capability further demonstrates the affect of the Secretary and Deputy Secretary of Defense's continued management attention to acquisition initiatives. By having 180 sets of these components "banked" in the FY 1982 funded delivery period, the M-1 tank production could be "surged" by an additional 30 tanks per month for a six-month period starting only eleven months from the decision to surge. Twenty-three months lead time are now required.

While the above categories address the programmatic results of direct and indirect inflation, new initiatives, etc., there is still another facet to our supplemental which we hope will be recognized. Increases are being requested for those areas where we have no control over the costs, such as:

	($ Millions)
Fact-of-life Increases	50
CPI Adjustment	98
Utilities	52
Postal Costs	8
Health Benefits	51
Cost Growth	263
Section 6 Schools	11
VEAP	11
Unemployment Compensation	54
Public Health Hospitals	8
Per Diem Equity	20

The above increases total $625 million and represent 27 percent of our supplemental request. When we add $184 million for the new entitlements associated with the Uniformed Services Pay Act, we then have $810 million, or 35 percent of the total program supplemental that are uncontrollable costs.

Favorable Congressional consideration of our program supplemental request will enable us to continue the planned buildup of our national defense that this Administration initiated last year and which was approved by the Congress in its actions on the FY 1982 appropriations. We must sustain the momentum established if we are to accomplish our stated objectives.

FY 1982 Pay Supplemental

Our supplemental appropriation request for FY 1982 pay increases will be forwarded separately in early spring along with the total federal government wide pay request.

V. Budget Execution

Budget Execution is an extremely important and complex process in DoD, due to the large number of installations, activities, and contracts that come under our control. We receive authority and resources to accomplish DoD programs through the legislation process, but incur obligations only upon a contractual action for services or materiel. Payment, which results in expenditures or outlays, is usually made upon performance of the service or delivery of the materiel.

In some cases, contractors may request progress payments based on a fixed percentage of their total recorded costs which result from payments they make in direct pursuance of the contract. These progress payments are liquidated as payments come due, as a result of delivery. These payments are designed to assure that no contractor is required to finance a working capital amount in excess of 5 percent of the total contract cost.

If all of these events were completed entirely within a single fiscal year there would be no unobligated or unexpended balances -- and there would be a one-to-one relationship between budget authority, obligations, and outlays. However, $67.8 billion, or over 31 percent of our FY 1983 outlay estimate results from prior year programs.

Over 45 percent of our FY 1983 TOA request will be available for obligation beyond the first year, due to the necessity to fully fund the capital investments approved in our budget, a concept fully agreed to by both the Congress and the Executive branch. Full funding requires us to track and manage these funds over the entire appropriation life, which can extend up to five years. Our outlay estimates are heavily dependent on historical information adjusted for current and future circumstances. We have concentrated on improving our outlay estimates.

Last year, my staff combined efforts with OMB and the Military Departments over a period of several weeks in order to determine more accurate spending rates. We considered historical trends within each appropriation, program composition and mix, and other pertinent facts and assumptions in arriving at our current rates.

Spending for the first four months of FY 1982 was $57.9 billion or 31.7 percent over 32.9 percent of time. This tends to confirm that our review is achieving its intended goal. Total Outlays for FY 1982 are expected to stay within our current estimate of $182.8 billion.

Unobligated and Unexpended Balances

Our balances are high and will go higher as a result of some of our management improvements, i.e., budgeting to most likely costs and more realistic inflation projections. It should be clearly understood, however, that these balances are not unique to DoD, all federal agencies have them. Neither do they cause a raid on the Treasury since their reduction is phased by contract award schedule over time in a disciplined manner. They also do not cost the taxpayer since interest is not paid on balances. Interest does not accrue on balances. Only when a balance ceases to be a balance and becomes a cash outlay from the Treasury does the interest charge begin. Again, this is exactly the same condition which results if the expenditure were for a non-defense program.

Balances are the normal arithmetic result of Congressional appropriations for fully funded programs being contracted over time against a disciplined schedule of contract awards based on varying leadtimes. Efficient business practices are fully utilized, as well they are warranted.

The next table reflects DoD unobligated and unexpended balances in dollars and as a percent of total availability. You will note that unobligated balances as a percent of availability are rising from 9.7 percent in FY 1981 to 10.5 percent in FY 1982 and 11.5 percent in FY 1983. Unexpended balances, which encompases unobligated balances rise from 41.6 percent of availability in FY 1981 to 43.8 percent in FY 1982 and to 46.1 percent in FY 1983.

Unobligated balances can of course be reduced by accelerating contract awards; however, that would result in gross inefficiency and waste. Unexpended balances could be reduced by paying contractors prior to performance and/or delivery, but that of course would be illegal. In short, there is nothing harmful, wasteful or unique about unobligated and unexpended balances. Principally they are the healthy arithmetic derivative of prudent, efficient business practices in areas of the budget involving capital investment programs.

The procurement title accounts for over 78 percent of the total unobligated in FY 1982 and over 82 percent in FY 1983. Procurement also represents over 67 percent of the unexpended balance in FY 1982 and over 71 percent of FY 1983.

Unobligated/Unexpended Balances
($ Billions)

Unobligated

	FY 1981 Actual		FY 1982 Est.		FY 1983 Est.	
	Dollars	% of Avail.	Dollars	% of Avail.	Dollars	% of Avail.
Military Personnel	-	-	-	-	-	-
Retired Pay	-	-	-	-	-	-
Operation & Maintenance	.5	.7	.6	.9	.6	.8
Procurement	19.4	28.9	26.6	30.1	35.6	30.1
RDT&E	1.5	7.7	1.4	5.9	1.6	6.0
Military Construction	1.7	29.1	2.1	27.8	2.3	27.4
Family Housing	.2	7.2	.2	7.4	.3	9.1
Special Foreign Currency	*	30.2	*	27.0	*	36.3
Revolving and Management Funds	3.2	4.9	2.8	4.0	2.6	3.6
Trust Funds	.1	30.9	.1	29.0	.1	28.2
Total	26.5	9.7	33.8	10.5	43.1	11.5

Unexpended

	FY 1981 Actual		FY 1982 Est.		FY 1983 Est.	
	Dollars	% of Avail.	Dollars	% of Avail.	Dollars	% of Avail.
Military Personnel	1.0	2.7	1.2	3.1	1.6	3.4
Retired Pay	*	.1	.1	.3	.1	.5
Operation & Maintenance	13.9	20.9	15.7	20.5	17.8	20.8
Procurement	73.4	67.1	97.1	69.8	131.5	70.4
RDT&E	8.2	34.8	10.0	35.2	12.0	35.1
Military Construction	4.6	64.6	6.9	71.4	8.3	67.6
Family Housing	1.0	35.0	1.1	33.4	1.4	36.7
Special Foreign Currency	*	51.0	*	89.8	*	93.0
Revolving and Management Funds	10.5	99.6	11.0	100.4	12.0	100.7
Defense-Wide Contingencies	-	-	.3	5.8	.1	2.6
Trust Funds	.2	93.6	.2	87.9	.2	85.8
Total	112.8	41.6	143.4	43.8	185.0	46.1

* Under $50 Million

Reprograming

One of the Carlucci initiatives that was not acted on by the Congress last session involves the granting to DoD of increased flexibility to transfer funds from the procurement accounts to the RDT&E accounts.

We still feel that this initiative will serve both the Congress and the Department in that it will allow appropriated funds to be transferred from the procurement phase of a program back to the R&D phase without necessitating a prior approval reprograming action. This flexibility would permit prompt solution to unforeseen problems in an R&D program, saving valuable time in implementing the "fix" and also saving dollars because retrofit of "fixes" can be minimized when they are identified early.

Congress is well served in this initiative because early production will be automatically slowed by the fund transfer to R&D and the correction to problems can be made quickly so that Congress will not have to wait a full budget cycle to see the results. Under the current practice of prior approval reprograming, considerable time elapses between the recognition of the R&D problem and the approval of fund transfer and this time equates to slippage in availability of improved weapons and costly retrofit of production items.

We are very willing to provide a reporting mechanism to insure that Congress is kept aware of any such fund transfers as they occur and, of course, we will brief members or staff on the problem on short notice.

I urge this committee to favorably consider this initiative and to work with me and my staff if you have concerns about features of the proposal which you would like to have changed or added.

Contracting

The General Accounting Office has acknowledged DoD's consistent leadership in relying on the private sector to obtain goods and services more economically. Thus, we have emphasized the contracting-out program in our FY 1983 budget. We have programmed the conversion of 20,218 personnel spaces to contractual services in FY 1982, over 2,000 more than was planned by the previous administration. For FY 1983, the budget provides for conversion of 17,620 additional personnel spaces to contract effort as shown in the following table:

Personnel Conversion to Contract

	FY 1982		FY 1983	
	Military	Civilian	Military	Civilian
Army	1,392	4,000	1,558	4,400
Navy/Marine Corps	-	7,426	-	7,625
Air Force	1,400	5,700	300	3,000
Defense Agencies	-	300	74	663
Total	2,792	17,426	1,932	15,688

The Air Force has pursued contracting-out vigorously over the past few years. The decline of about 2,600 personnel spaces, planned for conversion from FY 1982 to FY 1983 is due to the Air Force accomplishments in this program which naturally lessen the opportunities for further conversions. However, the Army and Navy will continue programs at levels comparable to FY 1982, and the Defense Agencies will convert logistics and audiovisual activities in FY 1983.

VI. Summary

This budget is a step toward providing an adequate military capability for this Nation. It requires financial and economic sacrifice; it comes at a time of economic concern in this country; it places an even greater burden on the Pentagon to see that all such funds are properly used; it has its critics. We will make every effort possible to work with this committee in its deliberations of this budget as closely as you wish. I, my staff, and representatives of the Military Departments and Defense Agencies are prepared to assist as we can.

CHART 1

DEPARTMENT OF DEFENSE BUDGET DEFENSE BUDGET TOTALS

($ BILLIONS)

CURRENT DOLLARS	FY 1981 ACTUAL	FY 1982 ESTIMATE	FY 1983 ESTIMATE	INCREASE FY 1982-1983
TOTAL OBLIGATIONAL AUTHORITY (TOA)	176.1	214.2	258.0	43.7
BUDGET AUTHORITY (BA)	178.4	214.1	257.5	43.4
OUTLAYS	156.1	182.8	215.9	33.1
CONSTANT FY 1983 DOLLARS				
TOTAL OBLIGATIONAL AUTHORITY (TOA)	202.2	227.8	258.0	30.2
BUDGET AUTHORITY (BA)	204.8	227.6	257.5	29.8
OUTLAYS	181.4	195.4	215.9	20.5

CHART 2

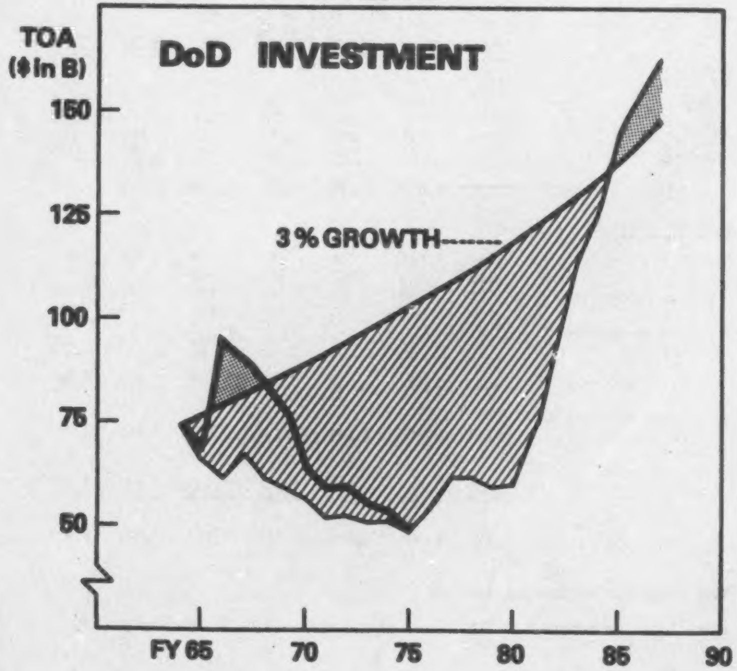


CHART 3

LONG-RANGE FORECASTS AND PAY/PRICE ASSUMPTIONS

	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987
TOA ($ BILLIONS)						
MILITARY RETIRED PAY	15.0	16.5	17.7	18.9	20.0	21.1
OTHER MILITARY FUNCTIONS	199.2	241.5	267.8	312.8	347.6	379.7
TOTAL, CURRENT PRICES	214.2	258.0	285.5	331.7	367.6	400.8
TOTAL CONSTANT (FY 1983) PRICES	227.8	258.0	269.8	297.8	314.0	325.9
PERCENT CHANGE	12.7%	13.2%	4.6%	10.4%	5.4%	3.8%
OUTLAYS ($ BILLIONS)						
MILITARY RETIRED PAY	15.0	16.5	17.7	18.8	19.9	21.1
OTHER MILITARY FUNCTIONS	167.8	199.4	229.3	266.7	304.1	334.9
TOTAL, CURRENT PRICES	182.8	215.9	247.0	285.5	324.0	356.0
TOTAL CONSTANT (FY 1983) PRICES	195.4	215.9	233.2	255.6	276.0	288.7
PERCENT CHANGE	7.7%	10.5%	8.0%	9.6%	8.0%	4.6%
COMPOSITE PAY/PRICE ASSUMPTIONS OUTLAYS (FY 1983=100)	93.6	100.0	105.9	111.7	117.4	123.3

CHART 4

Department of Defense Budget
Defense Employment Outlook

(End Year In Thousands)
Fiscal Years

	1981	1982	1983	1984	1985	1986	1987
Civilians							
Army	372	383	386	388	389	390	390
Navy/Marine Corps	321	319	321	320	321	321	321
Air Force	246	247	243	243	243	243	243
Defense Agencies	80	84	86	86	86	86	86
Total Civilians	1,019	1,033	1,035	1,037	1,038	1,040	1,040
Military (Active)							
Army	781	784	784	784	799	808	819
Navy a/	540	553	569	581	596	601	603
Marine Corps	191	192	195	196	199	201	203
Air Force	570	581	600	610	627	634	640
Full-Time Reserve/ Guard	19	22	41	48	54	58	61
Total Military	2,101	2,132	2,189	2,219	2,275	2,302	2,326
Total Military & Civilians	3,120	3,165	3,224	3,256	3,313	3,342	3,366
Defense Related Industry	2,230	2,515	2,862	3,100	3,300	3,500	3,600
Total Defense Manpower	5,350	5,680	6,086	6,356	6,613	6,842	6,966

NOTE: May not add due to rounding.

a/ Reflects transfer of 12,000 full-time end strength to Reserve Personnel, Navy in FY 1983.

PRESIDENTS BUDGET
PAY AND INFLATION RATE ASSUMPTIONS

FY 1981 - FY 1987
ANNUAL PERCENTAGE CHANGE

CATEGORY	1981 TO 1982	1982 TO 1983	1983 TO 1984	1984 TO 1985	1985 TO 1986	1986 TO 1987
PAY						
MILITARY	14.3	8.0	7.6	5.5	5.0	5.0
GENERAL SCHEDULE	4.8	5.0	5.0	5.0	5.0	5.0
WAGE BOARD	4.8	5.0	4.0	4.0	4.0	5.0
MILITARY RETIRED PAY	6.6	6.5	4.3	3.3	2.9	2.9
INDUSTRY PURCHASES (NON-PAY)	8.3	7.0	5.9	5.9	5.4	5.3
COMPOSITE, DoD	8.7	6.9	5.9	5.5	5.1	5.0

DEPARTMENT OF DEFENSE BUDGET
FINANCIAL SUMMARY

BY APPROPRIATION CATEGORY - CONSTANT PRICES

($ BILLIONS)

CONSTANT FY 1983 DOLLARS
TOTAL OBLIGATIONAL AUTHORITY

APPROPRIATION TITLE	FY 1981	FY 1982	FY 1983	CHANGE FY 1982-1983
MILITARY PERSONNEL	44.6	46.3	47.9	+1.6
RETIRED PAY	15.6	16.0	16.5	+0.5
OPERATION AND MAINTENANCE	61.5	66.3	70.4	+4.2
PROCUREMENT	54.8	69.8	89.6	+19.8
RDT&E	18.9	21.2	24.3	+3.1
MILITARY CONSTRUCTION	3.8	5.3	5.4	+0.1
FAMILY HOUSING	2.3	2.4	2.8	+0.4
REVOLVING & MANAGEMENT FUNDS	0.6	0.5	0.9	+0.4
TOTAL MILITARY FUNCTIONS	202.2	227.8	258.0	+30.2

TOTALS MAY NOT ADD DUE TO ROUNDING

DEPARTMENT OF DEFENSE BUDGET DEFENSE EMPLOYMENT OUTLOOK

(END-YEAR-IN-THOUSANDS)

	FY 64	FY 68	FY 75	FY 81	FY 82	FY 83	CHANGE FY 82-83
CIVILIANS							
ARMY	453	542	401	372	383	386	+3
NAVY/MARINE CORPS	346	433	326	321	319	321	+2
AIR FORCE	338	357	278	246	247	243	-4
DEFENSE AGENCIES	37	74	73	80	84	85	+1
TOTAL CIVILIANS	1,174	1,405	1,078	1,019	1,033	1,035	+2
MILITARY (ACTIVE)							
ARMY	972	1,570	784	781	784	784	-1
NAVY[a]	667	765	535	540	553	569	+16
MARINE CORPS	190	307	196	191	192	196	+3
AIR FORCE	856	905	613	570	581	600	+19
FULL TIME RESERVE/GUARD	b	b	1	19	22	41	+19
TOTAL MILITARY	2,685	3,547	2,128	2,101	2,132	2,189	+56
TOTAL MILITARY AND CIVILIANS	3,859	4,952	3,206	3,120	3,165	3,224	+59
DEFENSE RELATED INDUSTRY	2,280	3,174	1,800	2,230	2,515	2,862	+347
TOTAL DEFENSE MANPOWER	6,139	8,126	5,006	5,350	5,680	6,086	+406

NOTE: MAY NOT ADD DUE TO ROUNDING.

[a] REFLECTS TRANSFER OF 12,000 FULL TIME END STRENGTH TO RESERVE PERSONNEL, NAVY IN FY 1983

[b] LESS THAN 500 FULL TIME ACTIVE DUTY RESERVE AND NATIONAL GUARD PERSONNEL

MULTIYEAR PROCUREMENT INITIATIVES

	FY 1983 TOA Increase	5-Year Savings
C-2 Aircraft	32.4	58.4
SM-1 Missiles	48.1	62.7
EA-6B Aircraft	9.1	21.1
A-6E Aircraft	5.0	20.3
NATO SEASPARROW Missiles	9.0	37.2
MULE Laser Designators	10.5	5.5
T-AO Fleet Oilers	109.8	66.5
MK-46 Torpedoes	34.5	40.4
CH-53E Helicopters	29.9	35.0
DMSP Satellites	30.7	49.3
NAVSTAR GPS Systems	-	249.3
MLRS Rocket Systems	53.2	64.0
BLACKHAWK Helicopters	159.2	81.1
ALQ-136 Radio Jammers	14.5	14.7
	545.9	805.5

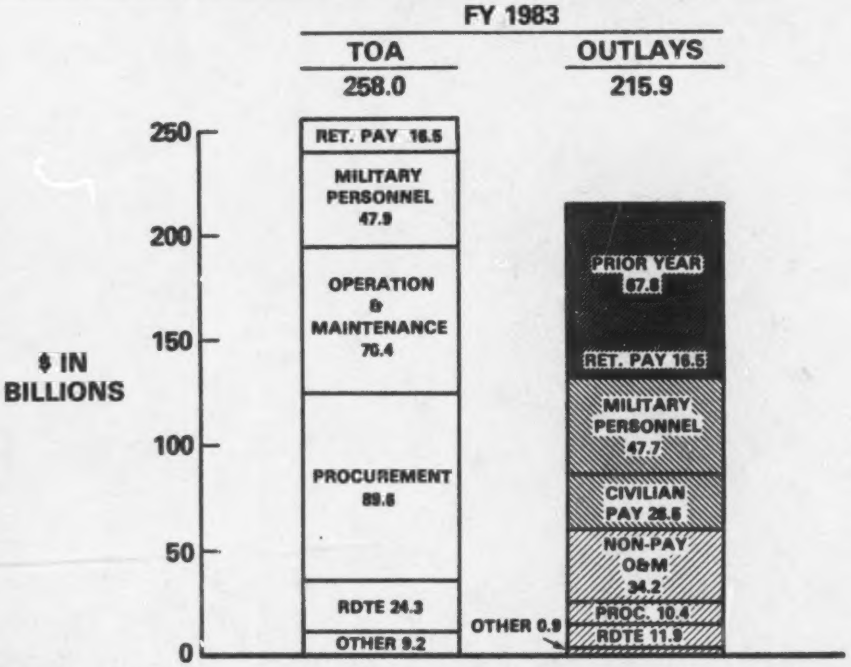
NOTE: Includes only the portion of FY 1983 funds for these systems that was added to initiate multiyear contracts and thus attain the beneficial effects of the "Savings" column.

Excludes F-16, F-111 Weapon Navigation Computer, and AN/TRC-170 radio programs which were initiated in FY 1982 and should save an additional $264.7 million over the 5-year period.

DEPARTMENT OF DEFENSE BUDGET - TOA
($ BILLIONS)

FY 1982	214.2
CHANGES FY 1982 TO FY 1983	
● PAY RAISES AND INFLATION	13.5
● ACQUISITION INITIATIVES	13.5
● PROGRAM INCREASES	16.8
MILITARY STRENGTH	(1.7)
FY 1983	258.0

FY 1983 BUDGET SUBMISSION



FY 1983 Department of Defense Budget
FY 1982 Program Supplemental Categories
Budget Authority ($ in Thousands)

DIRECT RESULT OF INFLATION ------------------------------------$519.8 million

- Fact-of-life Increases (MilPers) ($48 million)
- Retired Pay CPI Adjustment ($97.7 million)
- Increased Utilities ($52 million)
- Postal Costs ($8.1 million)
- Health Benefits ($50.6 million)
- Shipbuilding Cost Growth ($263.4 million)

INDIRECT RESULT OF INFLATION ----------------------------------$803.3 million

- Appropriation Act Underfinancing ($93.6 million)
- Fact-of-life Increases (MilPers) ($1.7 million)
- Intelligence Programs ($58.5 million)
- Reduce Real Property Maintenance Backlogs ($460 million)
- European Maintenance ($76 million)
- Fuel Inventory Buildup (2.3 million bbls) ($109.2 million)
- Korean Leases ($4.3 million)

NEW INITIATIVES --$332.9 million

- Retain & Support European Brigade ($62.3 million)
- POMCUS Sets 5 and 6 ($12.5 million)
- Public Health Hospitals ($8.1 million)
- M1 Tank Surge Capability ($126 million)
- Marine Corps - Logistics Vehicle System ($20 million)
- Emergency Support Equipment ($30 million)
- Adv. Ballistic Reentry Vehicle (ABRV) ($57 million)
- RDJTF, USREDCOM Base Support ($17 million)

TRANSFERS FROM OTHER GOV'T AGENCIES ---------------------------$75.4 million

- Section 6 Schools ($11 million)
- Veterans Educ. Assistance Prog. (VEAP) ($10.8 million)
- Unemployment Compensation ($53.6 million)

PROGRAMS WHICH OVERSIGHT COMMITTEES SUGGESTED SUPPLEMENTAL OR REPROGRAMMING ACTION BE SUBMITTED---------------------------$583.2 million

- New Discretionary Entitlements (184.1 million)
- Leased Satellite Communications ($58.6 million)
- Per Diem Equity ($20 million)
- Mobility Force Airlift (C-5/KC-10 aircraft) ($219.1 million)
- Ras Banas, Egypt, Upgrade (Southwest Asia) ($101.4 million)

$2,314.6 million

DEFENSE UNDERFUNDED IN PAST

Dr. BORSTING. I would like now to look at the past a little bit and look how we have underfunded defense in the past.

I wonder if I could show the first chart.

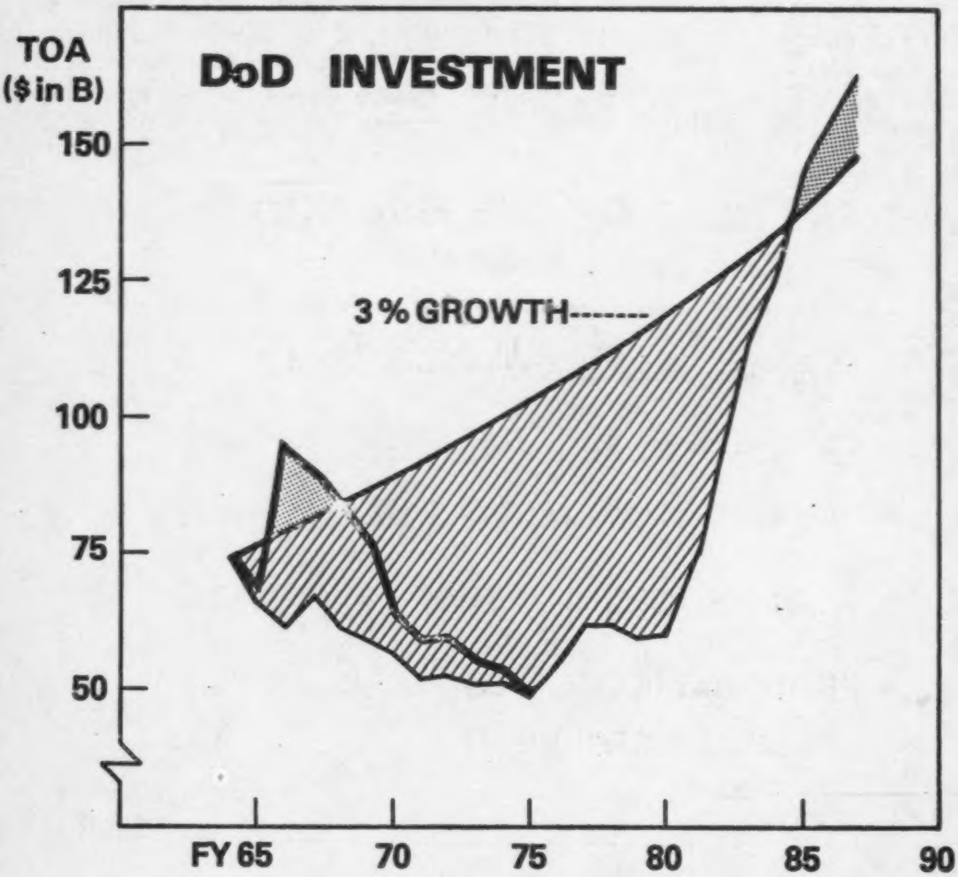


CHART 1

DOD INVESTMENT CATEGORIES

Dr. BORSTING. This is a chart that shows the investment categories of the Department of Defense. By investment I mean R. & D., procurement, and MILCON, the typical investment categories for any business. I think most businesses would want to have real growth of 2 to 3 percent in real terms over a period of time. So I have drawn a 3-percent real growth line there.

The bottom line is what actually happened in the past from 1965 on.

The other line is the Vietnam war which we expanded and went like this. If I take out the Vietnam war, and most of the elements in procurement were expended during the Vietnam war, and just look at the bathtub—I like to call this a bathtub chart—the amount under 3 percent real growth that we have lost from 1975 to

1985, which will get back up to the 3 percent line if we follow this program, is $725 billion under 3 percent real growth.

Senator Schmitt. What year dollars?

Dr. Borsting. These are just constant dollars.

Senator Schmitt. But what year?

Dr. Borsting. This would be in terms of 1983 dollars.

The shaded portion from 1985 on on top of the line would give us about $40 billion of that growth that we could recoup by around 1987 or 1988 if we followed the 5-year plan that I am going to talk about.

DEPARTMENT OF DEFENSE BUDGET - TOA

($ BILLIONS)

FY 1982	214.2	
CHANGES FY 1982 TO FY 1983		
• PAY RAISES AND INFLATION		13.5
• ACQUISITION INITIATIVES		13.5
• PROGRAM INCREASES		16.8
MILITARY STRENGTH		(1.7)
FY 1983		258.0

Chart 2

BUDGET REQUEST

Now talking about the 1982 to 1983 budget, as we mentioned earlier, it is $214.2 for fiscal year 1982 and that includes the military construction budget that this committee does not address. The $258 for 1983 also includes that MILCON which I believe is about $7 billion in 1983.

The composition of the changes from 1982 to 1983 are pay raise and inflation of $13.5 billion.

ACQUISITION INITIATIVES

Acquisition initiatives, now some of these aquisition initiatives I have already mentioned. The multiyear procurement added there and budget the most likely cost. There is also $6.3 billion to fully fund up front the two nuclear carriers.

One point I would like to emphasize is that we have tried in this overall budget to make it an honest budget, to price everything and to price weapons systems in the future as accurately as we can so that the Congress and the American people know what we think in the next 5 years things are going to cost.

INFLATION ESTIMATING

Senator SCHMITT. When you say pay raises and inflation, that is inflation according to your new method of estimating?

Dr. BORSTING. Yes. Again, that inflation will include the nonmajor weapon system items priced at the GNP deflator of the administration and the major systems that I talked about like track vehicles, including tanks, the missiles, the ships, and the aircraft, priced at roughly 1 percent higher. It varies from year to year in the outyears, but priced at about 1 percent higher.

Senator SCHMITT. Is that your equivalent of the Stevens' 3 percent? Do you know what I am referring to?

Dr. BORSTING. Yes.

Senator SCHMITT. Senator Stevens' estimate is that all major new modern weapons systems cost 3 percent more than anybody thinks they are going to cost.

Dr. BORSTING. I am not sure these are equivalent, but this is our attempt to price things more realistically.

Senator SCHMITT. No, outside of inflation. Whatever your best estimate of real cost was going to be, it was always 3 percent more.

Dr. BORSTING. Oh, I see. No, this is not quite the equivalent of the Stevens' 3 percent.

The program increases for 1983 are $16.8 billion. In fact, let me give you roughly the same number in terms of outlays. This is budget authority, total obligation authority. In terms of outlays for 1983 the inflation would be about 12.6, the prior year's spending about 15.4, pay and base operations about 12.5 and new initiatives about 5.1. That totals to the $30 billion roughly of increase in outlays.

So in terms of new investment initiative in outlays, the 1983 budget has about $5.1 billion of new money in terms of outlays.

Senator SCHMITT. You used different words again. Pay raises and inflation you said was 12.

Dr. BORSTING. This again is on budget authority.

Senator SCHMITT. I know, but you said you were going to give us now what that looked like in outlays and you used different words.

Dr. BORSTING. Yes, I did, and I used different categories, too, and I broke them out. Inflation was 12.6 in outlays. I broke out pay raises and inflation; 12.6 was inflation; 12.5 was pay; 15.4 was prior spending. These are in terms of outlays, 15.1 was new investment.

LONG-RANGE FORECASTS AND PAY/PRICE ASSUMPTIONS

	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987
TOA ($ BILLIONS)						
MILITARY RETIRED PAY	15.0	16.5	17.7	18.9	20.0	21.1
OTHER MILITARY FUNCTIONS	199.2	241.5	267.8	312.8	347.6	379.7
TOTAL, CURRENT PRICES	214.2	258.0	285.5	331.7	367.6	400.8
TOTAL CONSTANT (FY 1983) PRICES	227.8	258.0	269.8	297.8	314.0	325.9
PERCENT CHANGE	12.7%	13.2%	4.6%	10.4%	5.4%	3.8%
OUTLAYS ($ BILLIONS)						
MILITARY RETIRED PAY	15.0	16.5	17.7	18.8	19.9	21.1
OTHER MILITARY FUNCTIONS	167.8	199.4	229.3	266.7	304.1	334.9
TOTAL, CURRENT PRICES	182.8	215.9	247.0	285.5	324.0	356.0
TOTAL CONSTANT (FY 1983) PRICES	195.4	215.9	233.2	255.6	276.0	288.7
PERCENT CHANGE	7.7%	10.5%	8.0%	9.6%	8.0%	4.6%
COMPOSITE PAY/PRICE ASSUMPTIONS OUTLAYS (FY 1983 100)	93.6	100.0	105.9	111.7	117.4	123.3

CHART 3

LONG-RANGE FORECASTS

Now in terms of the 5 year plan, this chart, which again is in my statement, shows total obligational authority at the top growing from 1982 to 1983 at 13.2 percent. By the way, this again includes the MILCON and I can get the breakouts. I think your committee would like some of the breakouts without MILCON and I can get that for the record.

[The information follows:]

FISCAL YEAR 1983 DOD APPROPRIATIONS ACT LONG RANGE FORECAST

[Dollars in billions]

	Fiscal year—					
	1982	1983	1984	1985	1986	1987
Total obligational authority:						
Military retired pay	$15.0	$16.5	$17.7	$18.9	$20.0	$21.1
Other military functions [1]	191.9	233.1	257.8	300.5	333.9	363.3
Total DOD Appropriations Act, current prices	206.9	249.6	275.5	319.4	353.9	384.4
Total DOD Appropriations Act, constant prices	220.1	249.6	260.3	286.5	301.8	312.3
Percent change	+12.3	+13.4	+4.3	+10.1	+5.3	+3.5
Outlays:						
Military retired pay	$15.0	$16.5	$17.7	18.8	$29.9	$21.1
Other military functions [1]	162.9	193.0	221.6	257.3	293.0	322.1

FISCAL YEAR 1983 DOD APPROPRIATIONS ACT LONG RANGE FORECAST—Continued

[Dollars in billions]

	Fiscal year—					
	1982	1983	1984	1985	1986	1987
Total DOD Appropriations Act, current prices	177.9	209.5	239.3	276.1	312.9	343.2
Total DOD Appropriations Act, constant prices	190.2	209.5	225.8	246.9	266.1	278.0
Percent change	+7.8	+10.1	+7.8	+9.3	+7.8	+4.5

MILITARY RETIRED PAY

Senator RUDMAN. Let me ask one question about the top line. Going across the top, military retired pay, what assumptions in terms of cost-of-living adjustments and indexing are made in that line that goes from 15 to 21?

Dr. BORSTING. I believe that is also in the statement. From 1982 to 1983 it is 6.5 percent; from 1983 to 1984, 4.3; from 1984 to 1985, 3.3; from 1985 to 1986, 2.9; and from 1986 to 1987, 2.9. This is on the CPI.

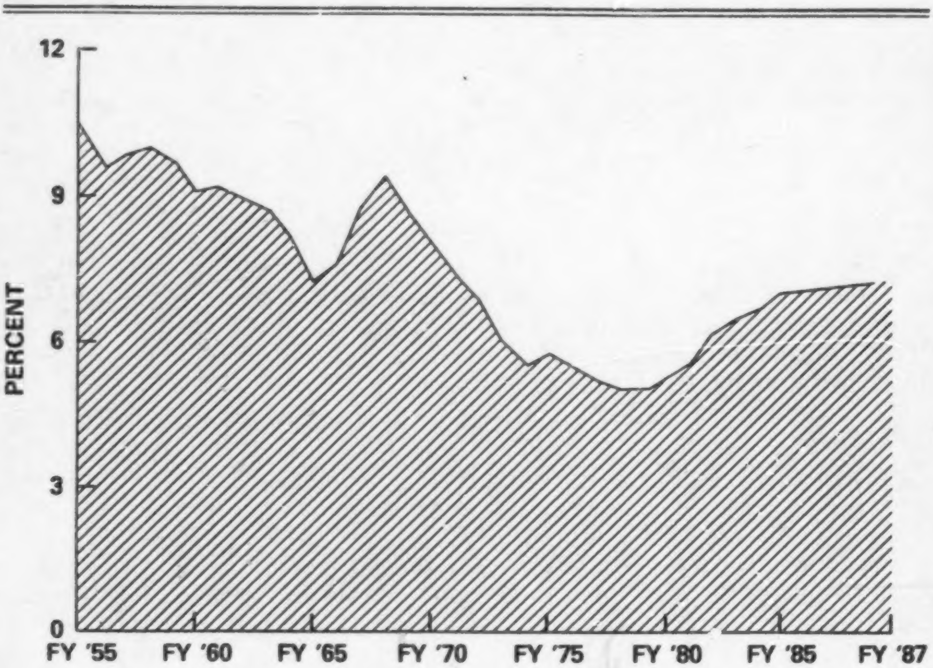
Senator RUDMAN. I understand.

Senator SCHMITT. We are going to do better than that.

Dr. BORSTING. We could even conceivably do better in the near term because in my personal belief we have inflation licked at the moment in this country.

Senator SCHMITT. Stick to your guns and we have got it licked.

Dr. BORSTING. I think we have got it licked, and I am not sure that we all realize it, that we have got it licked, but I think at the moment we have.



DEFENSE OUTLAYS AS A SHARE OF GNP

CHART 4

GROWTH IN BUDGET AUTHORITY

A comment on the sawtooth growth of total obligational authority. This is a little different than the past. The budget authority from 1983 to 1984 only rose by 4.6 percent and then we are back up to 10.4 percent and back down to 5.4 percent.

Usually we have had say a 7-percent growth or some *x* percent that has been preserved. We have not put the budget together that way this time. We have tried to put it together more on a programatic basis.

Also, we have tried to smooth outlays which I think are more important. If you look at the bottom you will notice that outlay growth from roughly 8 to 10 percent through 1982 to 1986 is a much smoother growth. That is what we spend in defense and to me that is much more important to have that smooth growth in outlays than in budget authority.

The budget that was up here earlier in March and also the previous administration's budget had a sawtooth effect on outlays and then a smooth growth on budget authority, and this has been turned around.

There are also other reasons. The 13.2 percent from 1982 to 1983 includes a lot of these initiatives that I talked about, the full funding of the carrier, the full funding of the economical production rates, up-front money that we will spend out over a period of time.

By the way, if there are any questions on these charts, I would be happy to take them now rather than go back to them.

WASTE IN THE BUDGET

Senator SCHMITT. It is not so much on a chart, Mr. Secretary, but right or wrong, and I suspect more right than wrong, there has been created a fairly general public perception that we waste an awful lot of money in the Department of Defense, that there are some numerous rat holes down which money flows that are basically unstoppable. Anybody who has been in the military will cite example after example of their military career, either as enlisted men or officers, where there have been ridiculous examples of waste of equipment, time, you name it, in the ranks, and then anybody who has been a contractor will give you ridiculous examples of how waste and inefficiency in procurement has been there.

So there is a very broad public perception that there is waste. How do you answer that? What are you doing about it?

Dr. BORSTING. Well, the 33d Carlucci initiative eliminated that line item that said waste. In a serious vein, though, some of the things I talked about, the 32 initiatives, Frank Carlucci's, are designed to do this, to significantly reduce waste, to significantly save so you can eliminate some of the waste in procurement in the acquisition area.

Also, on the economies and efficiencies, we have worked with the General Accounting Office and we have worked with the auditors. In fact, many of the General Accounting Office suggestions that they gave us, that they gave Secretary Weinberger when he reported in a year ago last January 20, have been implemented.

We have also established a new Special Assistant to the Secretary for Review and Oversight to strengthen our own audit policies. We also have a Council on Management, Integrity and Efficiency that meets once or twice a month.

AREAS OF WASTE IN SERVICES

Senator SCHMITT. Can you for our record give us some good nonbaloney examples of how these are actually being affected? You know, that is the biggest problem you have with this budget. I think there is a 60- or 70-percent popular support for rejuvenating our national defense, but there is also an 80- or 90-percent feeling that you are wasting a lot of the money that we are giving you.

We have got to be able to give the American people realistic assurance that that in fact is no longer happening, even though they all know in the past it has happened and they don't believe you can change it.

Dr. BORSTING. Well, I think you are right, Senator. In fact, last week when I was testifying with the Secretary I rode back to the Pentagon in a cab and the cabdriver was talking about the defense budget and he was saying that he was very much for strong defense and he hoped defense would not be cut.

Then he said, "But you know when I was in the service there were some things that I felt could be cut out and could be saved." I said, "Well, what service were you in?" He was in the Navy. I said, "Well, what things were wasted?" He said, "Food, for example.

There was too much food thrown away. It was wasted." I said, "Well, when were you in?" He said, "World War II." I said, "Do you think some of these things may have been changed by now?" He shook his head and said, "Well they are probably still there." Of course, he hadn't observed them at all since then.

I pointed out to him that the Navy had gone to more fast foods aboard ship and different ways of processing and I am sure had really significantly saved on food wastage. But he still had this impression from World War II.

AREAS OF WASTE TO BE ELIMINATED

Senator **Schmitt**. You have got a real public relations problem here. We all do. You have got to start to look at many of these perceived areas of waste largely because they used to exist. If they don't still exist, then give yourselves and us and the American people a clear feeling that that is no longer going on because it is going to be awfully hard to get that budget through here so long as there is that perception of waste and inefficiency in the military that millions of Americans have already been exposed to because they served in the military or because they have worked on defense contracts.

Dr. **Borsting**. Well, we will supply for the record some examples, not only the $60 billion over the next 5 years in economies and efficiencies, but also some additional examples of more recent things in the last month or so that have come up with the assistance of the Secretary for Review and Oversight and with the other economies and measures.

[The information follows:]

ELIMINATING INEFFICIENCY AND WASTE

The following examples demonstrate our commitment to eliminating inefficiency and waste within the Department of Defense.

In our February 8th report on economies and efficiencies we reported on such initiatives as Multiyear Contracting which will result in over $1 billion in saving in the fiscal year 1981 through 1987 and the establishment and maintenance of more economic production rates which will result in over $2 billion in savings over the same time period. In the operations area logistic support has been a very fruitful area for initiating economies and efficiencies. Over the last year we have transferred item management responsibility for an initial increment of 200,000 consumable items from the Military Services to the Defense Logistics Agency saving approximately $15 million annually. On a smaller scale but fully representing the economies and efficiencies program the Naval Finance Center's Military Pay Systems Improvement Project (MIPSIP) will provide significant automation of active and retired pay and entitlement systems. The resulting reduction in required personnel will generate cumulative savings of over $7 million in fiscal years 1982 through 1987.

In addition to the previously reported examples of economies and efficiencies the Assistant Secretary of Defense for Review and Oversight (ATSD (R&O)) has reported several significant initiatives in the last month or so.

Based on a U.S. Army Audit Agency Report, the U.S. Army Development and Readiness Command is taking action to reduce the proposed expansion of the Army's cannon production base. Deletion of the unneeded production capabilty will reduce requirements for new industrial plant equipment by about $13.6 million and eliminate the need to withdraw about $2.1 million of equipment assigned to contractor plant equipment. Also in response to Army audit recommendations, the U.S. Army Recruiting Command is taking steps to eliminate and/or reassign Army recruiters that should result in about $8 million in cost savings and a more efficient and effective organization. The Air Force has reduced the procurement cost of bomblifts an estimated 25 percent by providing the contractor with certain high cost structural components from used bomblifts. Savings are projected to be $17 million for the total procurement.

INCREASED EFFICIENCY

Senator SCHMITT. Well, maybe our two staffs can get together and work up a significant portfolio of how in the last 18 months things have really started to change and see if you can convince us first that in fact the rate of waste is going down steadily as this budget goes up.

Dr. BORSTING. I think we can.

Senator SCHMITT. If you can't, I am not sure you are going to get that budget through as it is presented.

Dr. BORSTING. I think we can convince you in the Senate. Getting that out to the American people is the much more difficult problem.

Senator SCHMITT. Well, that is part of our job.

Dr. BORSTING. Savings and economies and efficiencies are not news.

Senator SCHMITT. If we are going to use as part of our political platforms the rejuvenation of the national defense, then it is up to us to convince the American people that you can spend that kind of money and still at the same time decrease the waste and increase the efficiency of the forces.

Dr. BORSTING. Let me make one more comment on this chart.

Senator SCHMITT. Don't hestiate to interrupt, Senator Rudman, if you have any questions.

Dr. BORSTING. If you have any questions on the chart, please ask me now.

The budget authority or obligation authority grows at an average annual rate of 7.5 percent. The outlays are around 8 percent for the 5-year period.

DEFENSE SHARE OF GNP

The next chart shows the percent of the defense budget and outlays as a percent of our gross national product. It hit a low point around 1980 of 5 percent of GNP and it is projected in 1987 at 7.2 percent. This is still historically a fair percentage of gross national product for defense.

The Soviet Union, as you know, spends around 13 or 14 percent of their gross national product on defense. We are proposing to go in 1983 from 6.3 percent to 7.2 percent of gross national product.

Senator RUDMAN. Let me interrupt for one moment on your comment on the Soviet Union. Of course, that is on a considerably different basis. What is your current estimate, if it is not classified, as to current dollars spent in the Soviet Union? I know what their percentage of GNP is but I am not sure I know what their GNP is right now. I think it is two-thirds of ours, if I am not mistaken.

Dr. BORSTING. If I remember right, I have those figures somewhere. Maybe I will supply them for the record.

SIZE OF SOVIET GNP

Senator RUDMAN. Please do, because using percentages, I don't think a valid conclusion can be reached. You might say that Switzerland was spending 40 percent of its GNP on defense; that wouldn't be much of a comparison. I would just like to have the figures in the record rather than the percentages.

Dr. **Borsting**. All right.

[The information follows:]

Size of Soviet GNP

We have to be somewhat careful here because we are moving back and forth between two different estimates both of which have helped us over the years to gauge the scope of the overall Soviet military effort. We regularly compare the size of the GNP's of both the U.S. and the Soviet Union in dollars, because dollars are the measure we understand better than any other. However, dollars are not useful for considerations of the burden of defense on the Soviet economy where ruble estimates must be used. As to the specific information on Soviet GNP. The CIA estimates that the Soviet GNP in calendar year 1980 dollars was about $1,400 billion for 1980. This is about 55 percent of the U.S. GNP for the same year.

SOVIET SPENDING

Senator **Schmitt**. On the other side of that ledger, Senator, as you know from our briefing a couple of weeks ago, that there is no inefficiency of starting and stopping the Soviet military industrial complex. It just grinds along producing things at an ever increasing rate where we start and stop.

Senator **Rudman**. They are obviously buying more per dollar. I am curious as to just how much more they're purchasing.

Dr. **Borsting**. Well, in 1980 we estimated that the GNP in dollars would be about $1.4 billion. That is in 1980 dollars, $1.4 billion for 1980, which was about 55 percent of the GNP for the United States for the same year.

Senator **Rudman**. You mean trillion, don't you?

Dr. **Borsting**. Oh, pardon me, $1.4 trillion, 1980 dollars, and that is about 55 percent of the GNP for the United States for the same year.

Senator **Rudman**. And they were spending what percentage of that for defense?

Dr. **Borsting**. About 14 percent.

DEFENSE SHARE OF BUDGET

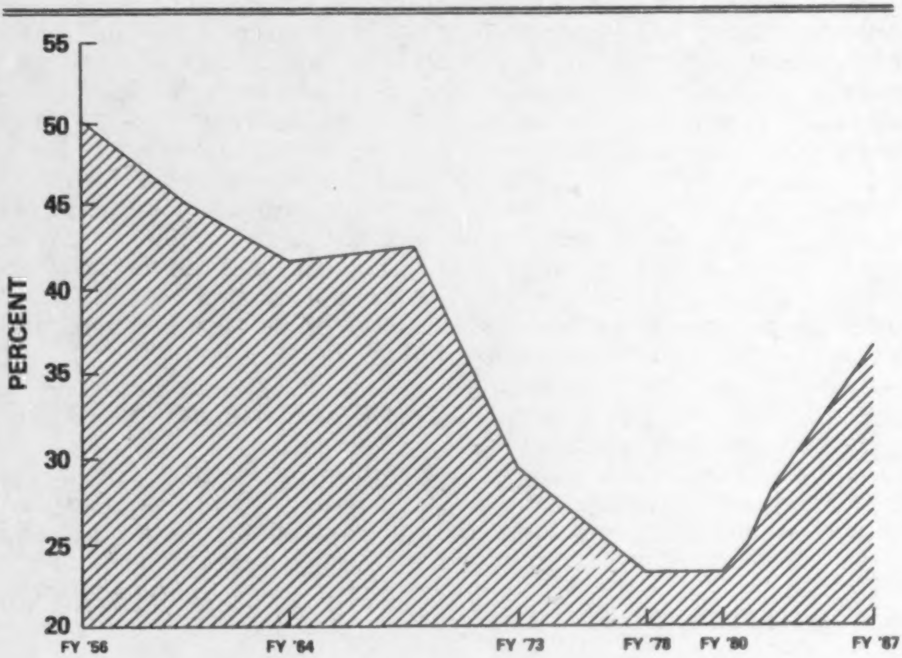


CHART 5

IMPACT ON THE ECONOMY

This chart also shows Defense's share of the budget which again is not going to be historically high even in 1987 which will be in the 1930's. It has been very low, around 22 percent or so and it hit bottom in 1980.

Let me make a comment or two about the impact of the defense budget upon the economy. There have been people who say that the increased spending will affect the economy in the out-years. We have been doing studies with various economists. We met with leading economists last fall and had various scenarios. We just don't believe that the increase in defense spending will significantly affect the economy or will add significantly to inflation or create that many bottlenecks. It certainly won't in the next few years. Our lead times are going down now.

We are also working with industry very carefully to try to plan the buildup. For the last 8 or 9 months we have been holding meetings with industrial representatives and talking to them about our 5-year plan and saying here is the 5-year plan and this is what you should be planning for in the way of expansion and capital investment. This has not been done before, to my knowledge, and this prevents a lot of the potential bottlenecks in certain industries.

This has been supported by Alice Rivlin in her testimony before the Congress. She doesn't really expect that we will have significant bottlenecks by the defense buildup.

BOTTLENECKS IN INDUSTRY

Senator SCHMITT. What do you mean by bottlenecks?

Dr. BORSTING. Where you just can't get certain parts and you have long leadtimes, say, for forgings and aircraft landing gear. For example, you would have 2 years delay and things like this and prices would go up significantly. That is what I am referring to.

Senator SCHMITT. That is why it is so important to get into longer range planning multiyear procurement. If I were out there in business and I knew that there was an annual uncertainty of whether you were going to really want any forgings or not, No. 1, I am not going to make them, and, No. 2, if I have an opportunity to do something in the private sector where there is more certainty and where multiyear procurement is the norm, then I am going to go for the private sector business and not the defense business, and that is exactly what has been happening.

Dr. BORSTING. That is correct.

Senator SCHMITT. So you will have bottlenecks as long as that perception and that reality exists.

Dr. BORSTING. That is why it is so important we have initiatives like multiyear contracting and a stable 5-year defense plan so that contractors can plan, and so that American industry can plan, and expand to meet these demands. If we go up and down they are not going to believe it, and they are not going to expand, and therefore we will have bottlenecks.

PRIVATE SECTOR GROWTH IN GNP

Senator SCHMITT. You say it won't be inflationary. The defense budget will be inflationary if there is no significant growth in the nondefense gross national product because basically defense expenditures pump money into the economy and that money can't be used individually to buy defense goods because that isn't the way it works.

You have got to have a private sector growth in GNP to use up the money that is pumped in by defense or you are going to have the same effect as if the Federal Reserve created an increase in money supply; isn't that correct?

Dr. BORSTING. Well, I think with the President's plan of the various initiatives, investment initiatives for business to increase capital investment, this overall economic plan is a very significant step forward to increase capital investment in the whole private sector and defense sector.

Senator SCHMITT. They have to go both or otherwise your defense budget will be inflationary. I am supporting what you are saying, but I am just saying that you can't have a steady growth in the GNP at the same time you are having a significant new growth in defense outlays.

Dr. BORSTING. Well, it depends really on how much.

Senator SCHMITT. In nondefense GNP.

Dr. BORSTING. Yes. It depends on the total economy certainly. We just don't feel with the program and with the various macroeconomic models that we have used that there will be significant inflation because of the defense buildup.

Senator **Schmitt**. That is because those models assume that we are going to have a steady growth, a significant growth in the nondefense sector of the economy.

Dr. **Borsting**. Well, they assume a reasonable growth, because if we had too much growth we could also have problems of inflation.

Senator **Schmitt**. No, you won't have problems unless you are pumping money into it in excess of the ability of the economy to absorb that.

Dr. **Borsting**. And you will also have to make assumptions about the money supply, too, in the models.

DEFENSE EMPLOYMENT

Let me also make a comment about employment. The total defense budget from 1982 to 1983 increases civilian employment by about 2,000, a very small increase in civilian employment, but it increases military active duty strength by 37,300.

Also, we have estimated that in the private sector the increase in the defense budget will add about 347,000 jobs to the economy from 1982 to 1983.

Senator **Schmitt**. Has that already started, that addition?

Dr. **Borsting**. Oh, yes.

Senator **Schmitt**. What has been the addition since, say, January or since the supplemental passed last year?

Dr. **Borsting**. I would have to get that for the record.

Do you have any feel, John?

Senator **Schmitt**. A couple of hundred thousand?

Mr. **Beach**. I couldn't tell you what part of the 347,000 expected increase has occurred since that increase is from fiscal year 1982 to fiscal year 1983, but the evidence suggests some increase is already underway.

ESTIMATE ON DEFENSE EMPLOYMENT

Dr. **Borsting**. We could get an estimate for you and would be happy to do that.

[The information follows:]

Defense Employment

The estimated increase in defense related procurement in the private sector is summarized as follows:

DEFENSE RELATED EMPLOYMENT

[End year in thousands]

Fiscal year	Number of jobs	Change from previous year
1981	2,230	208
1982	2,515	285
1983	2,862	347

We are now about six months through fiscal year 1982 and, from the data available, there appears to be employment increases taking place. Depending on events, such as enactment of the fiscal year 1982 supplement, we expect to have achieved about half of the increase of 285,000 jobs in fiscal year 1982 over fiscal year 1981.

EMPLOYMENT LEVEL CONSTANT

Senator **Schmitt**. So the fact that in the last few months we have numerically at least absorbed the new entrants into the job market and that the employment level has remained constant in spite of a declining or at least stagnant domestic economy is probably not attributable to the defense buildup at this time. Is that what you are saying?

Mr. **Beach**. I would say that some of it is probably attributable to it, yes. Obviously the labor force grows more rapidly when people know they can go in and get jobs. When unemployment is high like it is now there is less of a tendency for people to want to enter the labor force.

Dr. **Borsting**. One other thing that has been happening if you look at the unemployment statistics is you see in the last few years total employed increasing slightly, but of course the work force increasing greatly. This is because we are in the latter stages of the baby boom and the baby boom is still entering the labor market. The baby boom lasted through 1964; some of these people are just starting to enter the work force now and have been for the last few years. Therefore the labor force has been significantly increasing but the total employment has not increased that much. That has been the basic cause of unemployment because the economy has not been growing and has not been able to really make room for the new people wanting jobs.

RETIRED PAY

Senator **Andrews**. Well, not only the job holders in the Defense Department but the retirees from the military. Serving as I do on the Budget Committee as well as the Appropriations Committee, we are going through all kinds of gyrations in trying to cut this budget. What would we save if we eliminated the COLA on military retirees this year? Do you have that figure?

Dr. **Borsting**. The COLA on military retirees?

Senator **Andrews**. In other words, if there was no cost-of-living increase for military retirees. We would save $4 billion if we eliminated the COLA on defense military personnel and Defense Department employees.

Dr. **Borsting**. I would say the retired estimated would be around half a billion. That would be in the ball park. I was a little off, $615.5 million in CPI increases. So that is the pay increase. You would save $615.5 million on retired pay.

Senator **Andrews**. So if you eliminated the COLA on retired pay you would save $615.5 million. If you eliminated it on the military personnel you would save $3 billion. What about Defense Department civilian personnel, how much more would that be?

Dr. **Borsting**. About $1.1 billion.

Senator **Andrews**. Like Ed Dirksen used to say, you know, $100 million here and $1 billion there and pretty soon you add up to real money. We could save then roughly $6 billion by eliminating the COLA on Defense Department personnel and retirees in 1 fiscal year.

RETIRED PAY CPI

Senator **Schmitt**. You may look at that more closely for the record, and it would also be useful I think, once you do that, to give us the amount that you would add or subtract from your budget for each percent allowance, each percentage point allowance in the CPI.

Dr. **Borsting**. We would be happy to do this.

Senator **Schmitt**. That would be a back-of-the-envelope number we could then use probably.

[The information follows:]

Retired Pay CPI

The President's fiscal year 1983 Budget anticipates an 8.9 percent Consumer Price Index (CPI) adjustment on March 1, 1983. the cost of this adjustment is expected to be $615.5 million in fiscal year 1983. Each 1 percent change in the budget assumption would would increased or decrease the fiscal year 1983 cost by $69.2 million.

CIVILIAN PAY

Dr. **Borsting**. Let me make just a general comment which I am sure you are all aware of. The civilian pay, which of course is government-wide and we just have an input in civilian pay, but the civilian pay has been capped and civilian employees have been significantly running behind the rest of the labor force in the last few years and they are being capped in the outyears. Of course, it depends on what inflation it is in the outyears, and whether that may not end up being capped. But we have significantly hit the employee in the past. I might say I have a parochial interest in that sector.

Senator **Schmitt**. I thought you were a dollar-a-year man? [Laughter.]

Senator **Andrews**. Well, everybody has got a parochial interest. We are looking out there and seeing major labor unions taking not only a pass of the COLA but taking 10-percent cuts.

Dr. **Borsting**. I understand. I am just mentioning the Federal employee has been hit in the past. I realize you are going to consider this. Also, the military man has been hit in the past. Recently we have done quite well to bring the military up to equivalent standards on pay and benefits, and this has helped significantly in recruiting and retention.

So I think that the Congress has to look carefully that we don't endanger some of that for the future because our retention now in the middle-grade petty officers of the Navy and the senior NCO's of the Army and the Air Force is just much higher than it was in the past.

RECRUITING AND RETENTION

Senator **Schmitt**. Can you supply us in quantitative figures with the change in recruiting and retention and in some way give us a feeling for the level of experience and qualification of the people staying in. That is extremely important.

[The information follows:]

REENLISTMENT TRENDS

Reenlistment rates have been improving steadily over the last several years. A comparison of fiscal year 1981 to fiscal year 1980 in terms of the number reenlisting relative to the number eligible follows:

Service	Fiscal year 1981	Eligible		Fiscal year 1980		
		Reenlisting	Percent	Eligible	Reenlisting	Percent
First Term:						
Army	38,762	21,312	55.0	50,288	25,434	50.6
Navy	55,107	22,968	41.7	53,670	19,721	36.7
Marine Corps	23,875	6,340	26.6	19,364	4,493	23.2
Air Force	43,856	18,815	42.9	42,203	15,114	35.8
Total	161,600	69,435	43.0	165,525	64,762	39.1
Career:						
Army	77,981	56,580	72.6	82,722	57,359	69.3
Navy	39,196	28,551	72.8	32,581	21,835	67.0
Marine Corps	12,958	9,567	73.8	15,668	7,895	50.4
Air Force	49,693	42,784	86.1	46,929	38,409	81.8
Total	179,828	137,482	76.5	177.900	125,498	70.5
Total:						
Army	116,743	77,892	66.7	133,010	82,793	62.2
Navy	94,303	51,519	54.6	86,251	41,556	48.2
Marine Corps	36,833	15,907	43.2	35.032	12,388	35.4
Air Force	93,549	61,599	65.8	89,132	53,523	60.0
Total	341,428	206,917	60.6	343,425	190,260	55.4

Increased reenlistment will normally produce greater levels of experience. In terms of "quality" of the force, many different definitions exist, none of which are as accepted as the measures of quality in new accessions: i.e., possession of a high school degree and a high test score. When the high-quality personnel we are recruiting today flow into the career force, the quality of our noncommissioned officer force will increase on any relevant scale. It should be noted that today's reenlistment standards are generally most stringent. Mental requirements are tougher, careerists must attain certian grades to reenlist, and additional enlistment criteria have been added, such as weapons qualification.

RETENTION OF NCO'S

Senator SCHMITT. You are right. Everything I see out in the field in New Mexico indicates that in the Air Force and the Army ranks a lot of the highly experienced and qualified NCO's now can see it fit to stick out their full military career and it is making a lot of difference in morale throughout the services. I mean even the pilots now are a little bit more confident in flying their airplanes.

Senator ANDREWS. Not only in morale, but it saves dollars really because the cost of retraining, you know, you bring somebody in and you train them for 3 years or so and you get a couple of years of good use out of them and bang he goes. That is a pretty expensive way of running things.

Dr. BORSTING. I was just going to make that comment.

Senator ANDREWS. So there were some good reasons for bringing military pay up, and I am talking about this particular crunch year and what we do.

OPERATION AND MAINTENANCE

Let me ask one other question while I am on this budget thing. There is a lot of talk floating around of taking $10 or $15 billion, and $10 billion is usually said as being the rock bottom figure, and some people say 20 and some people say 15, will be hit upon as the figure out of the defense budget. The statements that come back are, well, we will have to, if we do that, of course, hit O. & M. pretty hard, and the day-by-day procurement is what is going to suffer in defense.

What would you in defense do, and what would be the impact on O. & M. if the budget reductions came in about $10 billion in your overall.

Dr. **Borsting**. You are talking of outlays now?

Senator **Andrews**. Outlays, yes. Are we going to get any prioritizing from you as to how you could achieve a $10 billion budget cut, or are we going to have to go into it by line item? Knowing how this committee works, I would imagine we will go into it by line item anyway.

Dr. **Borsting**. There are several questions in your question.

Senator **Andrews**. I recognize that.

Dr. **Borsting**. One was an operations and maintenance question. The operations and maintenance total budget is around $70 billion. So if you take $5 or $10 billion out of operations and maintenance, that is a very significant cut and you would have to do all sorts of things with deferring ship overhauls, which we now have down to zero. For example, we have a zero financial ship overhaul backlog. You would have to almost cut out all the depot maintenance and let that depot maintenance backlog go up and it will be down to zero in 1983.

Senator **Andrews**. We have heard that from the military themselves. Every year you are under a budget restraint, so-called, and some people say you get more money than you really know how to spend but you would always be able to spend more. But the proposition that comes out is that very often in the Defense Department you take it out of O. & M. and the maintenance on our vessels, as you just mentioned, and a host of other things just has been suffering because you wanted to go after the exotic new weapons systems given the total cap on dollar availability.

REAL GROWTH IN O. & M. TITLE

Have you any data that you can supply for the record and maybe briefly overview what has been happening in that area?

Dr. **Borsting**. Over the past years?

Senator **Andrews**. Over the past years, yes.

Dr. **Borsting**. Sure.

Senator **Andrews**. Has that been the case?

Dr. **Borsting**. Not in recent years, but the Congress has cut operations and maintenance in the past.

Senator **Andrews**. Well, we have done it by line item. It isn't that you have tumbled in that way.

[The information follows:]

REAL GROWTH IN O. & M. TITLE

There has been significant real growth in the O. & M. title for the past several years, when compared with the previous period. The turn-around began in fiscal year 1980 and was enhanced during fiscal year 1981, with the Reagan administration's amended supplemental request submitted in March 1981. This change of $6.8 billion included $1.8 billion for the O. & M. accounts. The fiscal year 1982 budget was also amended in the March–October 1981 period to request an additional $.7 billion for O. & M. during this fiscal year. The fiscal year 1983 budget request continues to reflect sufficient growth in the O. & M. accounts to support the readiness and sustainability gains programed for the period. The following chart indicates the real growth in O. & M. for the fiscal year 1978–83 time period.

OPERATION AND MAINTENANCE TITLE TOTAL OBLIGATION AUTHORITY CONSTANT FISCAL YEAR 1983 DOLLARS

[In millions of dollars]

	Fiscal years—						
	1977	1978	1979	1980	1981	1982	1983
Appropriated/requested	53,612	53,938	54,355	57,557	61,454	66,270	70,434
Change from previous year		326	417	3,202	3,897	4,816	4,164
Percent change		.6	.8	5.9	6.8	7.8	6.3

AMMUNITION PROCUREMENT

Senator **ANDREWS**. What about the procurement of ammunition and normal housekeeping chores? Has that been done by the Congress or by the Defense Department?

Dr. **BORSTING**. The procurement of?

Senator **ANDREWS**. Small arms ammunition, stockpiling of shells for our tanks and all of the rest. Has that been something that the Congress has line itemed at you, or has that been something that you have done in order to put more money in the so-called exotic superweapons systems?

Dr. **BORSTING**. Well, it has been probably a combination of both in the sense that we propose things to you in various line items, other procurement, operations and maintenance, and then the Congress has cut.

I think that chart could be put back on about the investment category that I showed at first.

Senator **ANDREWS**. The reason for asking the question is that when we take this bill to the floor we go into, you know, another step in the threshing of it, and there is a lot of thinking about the general public that over the years the Defense Department has in fact been cutting the ammunition procurement in order to take care of their wishes for the advanced new things and that we don't have enough shells for our tanks and we don't have enough ammunition for our rifles and we don't have enough this, that and the other thing.

If we can establish a record here we would have that information so that we could say, look, this was done by Congress and this wasn't done by the Defense Department or this wasn't backed up by the Defense Department or it wasn't done at all.

Senator **SCHMITT**. I think the answer is the responsibility is shared.

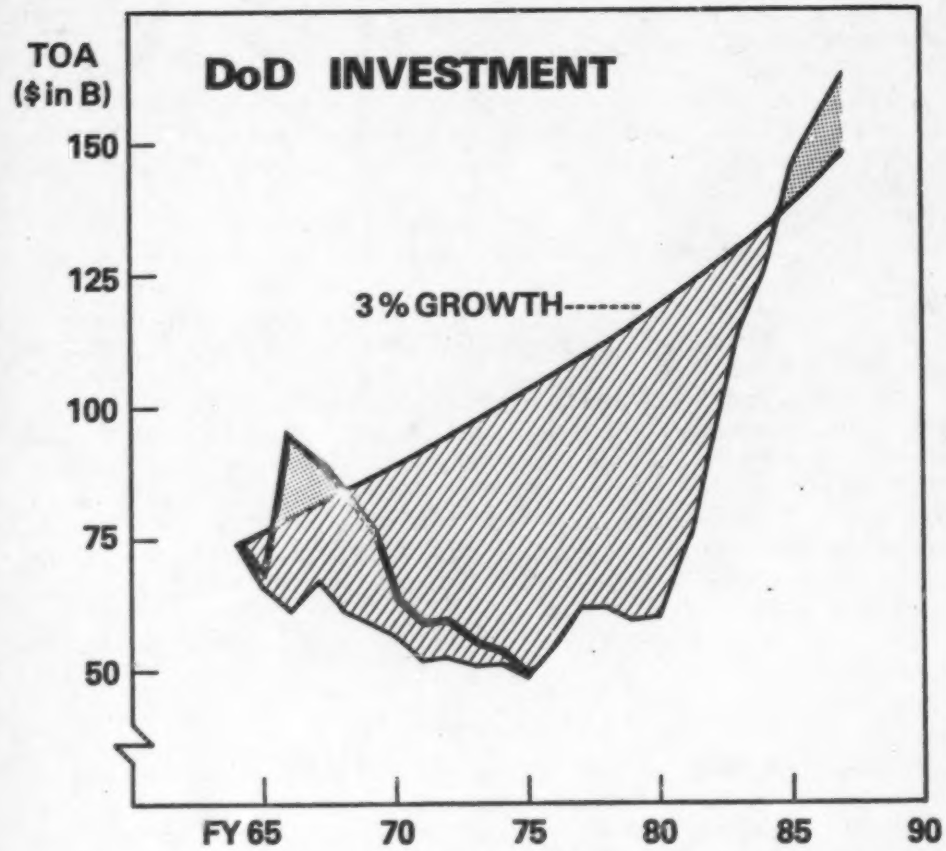


CHART 6

DOD INVESTMENT

Dr. BORSTING. That is correct. Here is the investment calculation, Senator Andrews. If you take a 3-percent growth on procurement. R. & D. MILCON, and the other procurement you are talking about would be in here. This shows you what has happened in the combination between administrations and the Congress, that if we remove the Vietnam portion of that graph there has been $725 billion that we have lost if we set a 3-percent real growth a year as a goal as a good business should. So we have lost this in the past and we are trying to gain it back now.

Back to your question about cutting, we have already taken a $5 billion cut in 1983 outlays that we took in September from the March budget in which we saved money. The President did reduce the defense budget, as you will remember. Also the savings package that I indicated to you earlier in my remarks saves another $6 billion or so in outlays and about $7 in budget authority. So we already have taken significant savings out of the 1983 budget.

Senator ANDREWS. Savings from what?

Dr. BORSTING. Savings from what we would have had to ask for if we hadn't have taken the savings.

Senator Andrews. Sure, but that comes down like when did you stop beating your wife.

Dr. Borsting. Yesterday.

Senator Andrews. I mean, you know, you took the savings out from things that you have liked to have had, and are they really savings. Actually you are spending more on those categories than you did last year.

Dr. Borsting. We are certainly spending more money. Now we could have come over with a budget that had extra money in it and then said, OK, you can cut the budget, we have got this amount of fat. We did not do this. We wanted to have the savings already in the budget. We wanted to present an honest budget to you and that is what we have done.

Senator Andrews. One final question. You have got a lot of so-called phantom divisions and groups that aren't up to strength out there. We are told that we can save a lot of money if you put them together and had a number of totally formed divisions ready to go. We are told that there ought to be a little bit more look/see at what the Air Guard does and at the Guard and Reserve categories of all the services, and instead of forming new squadrons that you beef up what you already have.

Dr. Borsting. Are you talking Guard and Reserve or Active Forces?

GUARD AND RESERVE

Senator Andrews. I am talking Guard and Reserve as well as Active. In active we understand that there are a number of components and divisions or whatever that aren't up to strength and that there would be savings if you would flesh up and have fewer full strength divisions and if you moved some of the weapons and other components back in to really beef up the Guard and Reserves, if you are going to have a Guard and Reserves, and I feel very strongly we should, that we would have a better system if we did that instead of building yet more marshmallows out there.

Dr. Borsting. Well, one of our goals, and what we have been trying to do, and the Army has been trying to do, with regard to both the Active and the Reserve forces is not to have a hollow Army. In fact, in the 1982 and 1983 and 1984 budget a lot of the Army's budget has been going to filling out the existing divisions and getting them equipment and manpower.

Maybe General DeLaune would like to comment a little more on that.

General DeLaune. Senator, we are looking right now at the total modernization capability within the Army. As we get the new equipment in there is a cascading effect because that old equipment is overhauled and being issued to the Guard and Reserve. At the end of March there will be a complete study and a transition plan. We are going to have a better fix at that time and know exactly what equipment is going to which unit. It will be by unit. It will then start to flesh out the equipment problem that we have right now in the Guard and Reserve.

We still have an equipment problem in the Army because we are not up to speed in numbers or in the types of equipment we are trying to buy.

With respect to your question concerning the, I will call it cadre divisions, the Army is looking at that now. We have added no structure in this year's budget, but as we look into the program years we are looking at exactly what you just mentioned, taking the Guard and Reserve divisions, taking the units and forming them into additional divisions for better efficiency and economy.

NEW AIR FORCE SQUADRONS

Senator **Andrews**. The Air Force is really the one that we hear more stories about. I understand you are now thinking about setting up some new squadrons when you really haven't done much to flesh out the equipment in some of the Air Guard present squadrons that you have got.

What is the status on that? Are you adopting in the Air Force the same type thing General DeLaune indicated the Army is doing?

Dr. **Borsting**. Mr. Umphrey, would you like to commment on that?

Mr. **Umphrey**. Sir, I think the Air Force has fairly modern equipment. We are buying A-10's directly into the Guard. We have C-130's that the Congress has added in the last few years that are going directly in there. We are getting rid of our 105's. Of course we can't flesh it out as we go up, obviously, but I think we are upgrading the Guard and Reserve as fast as we can.

Senator **Andrews**. But at the same time you are adding new squadrons to the Air Force.

Mr. **Umphrey**. Yes, sir.

Senator **Schmitt**. If the Senator will yield, I think your questions are very pertinent certainly with respect to the Army Guard. The Air Guard and Air Reserves have traditionally been in better shape than the Army Guard has.

Senator **Andrews**. That is very true, but even in the Air Guard we are finding that, and we are finding, I am told, that they plan to, as he just indicated, Mr. Chairman, that they are going to add additional squadrons in their regular service where they still have got a number of Air Guard squadrons that are underequipped or equipped with extremely obsolete systems.

MOBILIZATION EFFECTIVENESS

Senator **Schmitt**. Well, I am in total agreement that if you are going to have a force that can be mobilized in most of the situations that we can imagine the bell ringing in, it is going to be through Guard and Reserve forces and not through having an implemented draft. I believe in registration but I don't think your draft solves your mobilization problem. The only thing that is going to solve your mobilization problem is a Guard and Reserve force that is well equipped and is well trained and is fully integrated into the active operations of your regular service forces.

I just want to be sure that we recognize that there has been more progress, not enough, but more in the Air Force than there has in the Guard or in the Navy Reserve. In fact, the Guard and Navy Reserve, in my opinion, are a total shambles. They certainly are in New Mexico and in the Southwestern parts of the United States.

The New Mexico Army Guard, as you have heard me say too many times, has a weapons system as its principal weapons system that was obsolete in the Korean war, which is a 40 millimeter system, M-42's. We have heard that they may give them a 20 millimeter system, the Vulcan, instead of upgrading to a 40 millimeter system such as the Divad. That doesn't sound like a good plan to me, but I may not be objective.

In addition, there are tremendous opportunities for the integration of new equipment into the Guard forces to help fight the drug traffic along our southern borders and potentially elsewhere. So there is just a lot of opportunities where we can get an awfully big bang for our buck if we just are willing to increase the proportion of upgrading that goes for our Guard and Reserve forces. I certainly don't want to see our regular forces in any way depleted, but I think there has to be a simultaneous growth.

Senator ANDREWS. Mr. Chairman, I totally share your feeling. You and I have talked about this for a good many months. I am applauding the Army. I was told 15 years ago don't ever ask a question that you don't think you know the answer for, and I probably had some design in bringing up this line of questioning, but I am totally in support of what the Army is doing. They recognized the spot they have been in and they are correcting it.

But as the Army is correcting it through their Guard and Reserve and regular units, the Air Force is slipping into the same spot that you and I have been concerned about the Army being in as I see it out in the field. The Air Force is adding, as I understand, new squadrons, and that is going to sop up a whale of an awful lot of equipment in the regular force and they have got shadow squadrons in the Guard and the Reserve. You have got old equipment. You have got a bunch of stuff that nobody would really want to take out into combat.

If we are going to have an Air Guard, and I think we should have one, and I think this committee certainly backs it up and the Congress does, then instead of adding more squadrons in the regular Air Force, let's use some of this new equipment that is coming on line to flesh out and beef up the squadrons we have got in the Guard.

AIR FORCE SQUADRON INCREASES

You already indicated that you are increasing the number of squadrons in the regular Air Force. Could you provide for the record what that number of squadron increases are and what percent of plane replacement in the Guard and Reserve you contemplate in the next 2 or 3 years?

Mr. UMPHREY. Yes, sir.

[The information follows:]

INCREASE IN SQUADRONS

The active Air Force is growing during the fiscal year 1983 thru fiscal year 1985 period, but not at the expense of Air Reserve Force (ARF) modernization. In fact, during this period the active tactical fighter force increases by only two squadrons, from 79 to 81 at the end of fiscal year 1985. The new active squadrons are in the F-16. The tanker force increases by two additional KC-10 units with two corresponding new Associate Reserve KC-10 squadrons. The 50 aircraft C-5B program, will begin delivery during this period, and eventually result in three new active squadrons and three new Associate Reseve squadrons by the end of the program.

The modernization of the Air Force Reserve and Air National Guard is continuing, in fiscal year 1983 thru fiscal year 1985 over 13 percent of the ARF fiscal year 1982/4 fighter strength is modernized. The F-16 is introduced to both the Air National Guard and Air Force Reserve and the F-105, C-7 and C-123 are retired. The last six new production A-7K's are delivered to the Air National Guard giving each unit at least one A-7K. Fourteen new production C-130H aircraft are also delivered to the ARF.

GUARD AND RESERVE EXCELLENCE

Senator Schmitt. Mr. Secretary, let me add one other thought here. Don't ever forget that your greatest base of experience is in the Guard and Reserve. The people there have obviously an average number of flying hours or an average number of years in military activities far in excess of the average in the regular services. So you get again a greater bang for your buck when you take advantage of that.

It is not accident that, for example, the New Mexico Air Guard A-7 Group wins the Walker Trophy practically every year as the best air-to-ground unit in the Air Force. They ought to. They have all got 3,000 hours of flying time or more and the maintenance people have 20 or more years of experience in maintaining aircraft. They ought to be good. If they are not I would be very, very disappointed.

Dr. Borsting. I was just going to say that we realize this and I will supply for the record some of the summaries of the increase in Reserve and Guard programs. There is a $2 billion increase, an increase in procurement of about $617 million and increased operations and maintenance of about $293 million, and the military end strength, we are increasing 53,000 people in the Guard. In fact, this increase for additional Reserve and Guard has been increased over the years. We have about the same sort of increase every year for the next 3 or 4 years. So we are consciously worrying about getting a stronger Guard and Reserve program.

[The information follows:]

GUARD AND RESERVE PROGRAMS

[Amounts in millions of dollars]

	Fiscal years—							
	1981	1982	1983	1982-3	1984	1985	1986	1987
Funding	9,490	10,841	12,867	+2,026	13,773	15,537	16,841	17,951
Military personnel	3,141	3,512	4,608	+1,096	4,830	5,253	5,495	5,669
Operation and maintenance	4,164	4,678	5,040	[1] +362	5,141	5,586	6,230	6,651
Military construction	233	311	262	−49	337	327	350	367

GUARD AND RESERVE PROGRAMS—Continued

[Amounts in millions of dollars]

	Fiscal years—							
	1981	1982	1983	1982-3	1984	1985	1986	1987
Procurement	1,952	2,340	2,957	+617	3,465	4,371	4,766	5,264
End strengths:								
Military	899,014	946,241	999,503	+53,262	1,041,394	1,074,931	1,103,087	1,127,509
Military (full-time)	(18,979)	(22,163)	(41,023)	(+18,860)	(47,700)	(53,570)	(58,395)	(60,760)
Civilians	72,809	74,210	73,258	−952	73,318	73,143	73,187	73,210

[1] Includes $69 million for civilian pay raises.

AIR GUARD AND AIR FORCE RESERVE

Senator SCHMITT. Mr. Secretary, I am going to leave you in the tender hands, I guess, Senator Rudman, are you scheduled to take over?

Senator ANDREWS. I have to leave, but let me nail this one down for sure, that we do get a definitive statement for the record of the number of new Air Force units that are being brought in, the number of new squadrons. Do you have those on top of your head right now?

Mr. UMPHREY. We are building from 38 TAC fighter wings up to 44 over the FYDP period.

Senator ANDREWS. You can give us the equipment that is going in there. You can also tell us how many units you have got in the Guard and then what the status of their equipment is and how you are upgrading that.

It seems to the committee when we have talked among ourselves that given the problem we have noted in the past that it doesn't make a whale of a lot of sense in adding these new units in the Regular force until you take care of upgrading the Guard.

Mr. UMPHREY. Senator, the Air Force doesn't feel like the Reserve and the Guard are in the situation that you identify. We believe they have good equipment. They all have missions, they are well trained, they have good support forces from the Active Forces when they need them, we are modernizing the equipment and as we get more F-15's and F-16's more F-4's will go into the Guard. I believe that our equipment is not in the same situation as the Army's. I realize that the Army needs equipment, but we started higher than they did.

Senator ANDREWS. Well, you started higher than they did, but the tendency I am seeing, as I understand it, is that you are slipping into the same trough that they were in while they are pulling themselves out. That is the thing that concerns me.

As far as I am concerned, if we have a Guard unit out there and they are doing the job they are supposed to do, they ought to have equipment that is modern enough so they can go and defend this country right quick. Having a 20-year-old airplane or a 30-year-old airplane, systems that are obsolete and a host of other second-rank stuff doesn't fit in. If you can put the more modern birds down there and eliminate adding some of these new squadrons, that is the place where we can get some of these savings that we are looking.

The Guard gives us more flyability per dollar than any other area that we have got, and if we are trying to save bucks it seems that if we have got overaged airplanes sitting in the Guard units that we would be better off sticking the new ones down there than adding the new squadrons at the top. That is why I want to look at the details you are going to give us.

Dr. **BORSTING**. I think your concern is really for the future of the Air Force.

Senator **ANDREWS**. Well, what are we talking about if we are not talking about the future.

Dr. **BORSTING**. In the past the Air Force Guard has been in good shape by comparison. You are concerned with the expansion and what will happen.

Senator **ANDREWS**. I am looking at a trend that I see developing where we have found, as Senator Schmitt pointed out, that the Army is correcting a problem that has been around for some time and doing it well, and we salute them for it. On the other hand, we see the Air Force falling into, as I said before, the same problem that the Army has been involved in for a decade or more. While the Army curve is up, the Air Force curve seems to be down, and instead of fleshing out and doing a better job with the equipment going to the Air Guard squadrons, they are adding six new units or so in the Regular Forces while neglecting the Guard.

I think we can save considerable money by bringing the Guard up to a little more modern level and doing it that way. That is one of the things the committee has to look at given today's tough budget.

So please give us as much detail as you can, and our people are going to be working with the committee's staffs so that we are sure that we have that.

Dr. **BORSTING**. We will.

Senator **ANDREWS**. The general has a comment.

ARMY EQUIPMENT PRIORITY DESCRIPTION

General **DELAUNE**. May I supply for the record a description of the Army's priority distribution for equipment because first it goes to the early deployers. I think it would be very helpful for the committee to see that.

Senator **ANDREWS**. I think the committee would like very much to see that, General DeLaune. I appreciate it a lot.

[The information follows:]

ARMY PRIORITY DISTRIBUTION FOR EQUIPMENT

Distribution of resources (personnel and equipment) within the Army is accomplished by use of the Department of the Army Master Priority List (DAMPL) and the Department of the Army Program Priority List (DAPPL). Although the DAMPL and DAPPL distribute both personnel and equipment this discussion will only address equipment.

The DAMPL distributes equipment in the budget year while the DAPPL represents the DAMPL in the POM years, taking into account known force structure and unit mission changes. The DAMPL/DAPPL establish overall Army priorities for the distribution of equipment; these lists display major commands, activities, and units in a relative order of priority among claimants for the allocation of commonly required resources. Both are developed under the DOD guidance and the DOD Force/Activity Designator (F/AD) System which establishes five priority levels for use by the services. The DAMPL is designed to transition the Army from peace to war.

Active and Reserve Component units are assigned to Force/Activity Designator groups, and sequenced within each group, based upon DOD criteria for each group—essentially the deployment/employment dates of the units based upon their assigned mission. Reserve Component units are assigned the same priority as Active units with similar missions.

This system routinely allocates more equipment to earlier deploying/employing units and places overall Army shortages in later deploying or CONUS units where the most time and flexibility exists to correct them in the event of mobilization.

Since the relative importance of a given piece of equipment varies by unity and varying degrees of availability of items exist, out-of-priority sequence issues are frequently made to meet urgent or new requirements such as activations, new training base needs, special projects like the High Technology Test Bed, and minimum levels of training. For critically short items, these requirements, and needs of deployed and early deploying units are frequently only partially filled to allow spread of the limited resources to fill the maximum number of units/projects at least to minimum levels.

PLANNING PROCESS

Senator RUDMAN. Dr. Borsting, we have been talking about nickels and dimes and billions and millions. I would like to talk about something a bit different for a while.

What kind of long-range planning do you do with the unified Chiefs of the services? How far into the future are you looking?

Dr. BORSTING. Well, let me go back to the planning process that goes in the Pentagon. Starting early last fall we looked at fiscal year 1983 and then the next 5 years and somewhat beyond. We are trying to look beyond 5 years. It becomes difficult to do this, as you well know, and to project, but we are trying to go from 5 to 10.

I am a member of the Defense Resources Board, which is chaired by Frank Carlucci, along with the service Secretaries and the other Assistants and Under Secretaries like Dr. DeLauer and Fred Ikle and Larry Korb. The planning process has really been under Fred Ikle who is the Under Secretary for Policy and he has been honchoing that.

We went through last fall bringing in the commanders-in-chief of the various commands, CINCPAC, CINCLANT, the Readiness Commander, Don Starry, all the various commanders to get their input. We of course had the Joint Chiefs' input and the various OSD staffs. We forecast what we thought the threat was, based on intelligence information and based on that and on budget constraints, put together the 5-year plan that I showed you earlier and that resulted in the 1983 budget.

Senator RUDMAN. It is my understanding that Strategic Guidance and Planning has essentially designed a series of policy options that if adopted and once validated would add something in the order of $150 billion a year in outlays on top of our current budget. Is that correct?

Dr. BORSTING. No, that is not really correct.

Senator RUDMAN. We are now suffering under a frontal assault on the defense budget. We are suffering that assault for a variety of reasons.

One of those reasons is the size of the deficits.

Second, we have an economy that is in poor health.

Third, we have a number of programs which are very important to various constituents in this country that are being reduced.

Adding on to all of that, we have what Senator Schmitt referred to, those examples of outlandish cost overruns which opponents of defense use to beat the defense budget.

Faced with that scenario, the natural tendency is to come in here and find all the ways and means to tell us that we can get by at this level because this is all that we can consciously afford.

IS THE BUDGET LARGE ENOUGH

If I understand the testimony by the Deputy Chief before the Armed Services Committee, it was their contention that to meet the threat that is presently being evaluated, this is an insufficient budget.

I would like your response to that.

Dr. **Borsting**. There are people at all ends of the spectrum. There are some people who would say that our present 5-year plan is too low. There are some people that would say that it is much too high. In other words, you could probably find people who would say that it was $750 billion more than what you really need for the defense of the country. Other people may even say more.

Senator **Rudman**. I would like to talk about the people who are charged by the Constitution and the laws of this country, the Chiefs of Staff. What do they think?

Dr. **Borsting**. That is what I will be getting to. You have wide variance on what should be an appropriate defense budget, and it is really the degree of risk you want to assume for the country in any future contingency. What degree of risk are you willing to assume?

Now this is thrashed out in the Defense Resources Board and then the Secretary of Defense decides on what level, of course in conjunction with the President, on the overall funding level for defense.

Now we feel, or at least I feel personally, that the present defense budget is a good budget and it will do the job with the minimum amount of risk. If we added more money we would certainly have less risk. I think the Chiefs have to testify for themselves. Maybe they would say that more money would cut down the risk. It certainly would. But in my feeling, and in the Secretary's feeling, we have a good defense budget with what I would say would be fairly minimum risk.

Senator **Rudman**. Well, if we want to talk about risks, the Navy's budget, and we look at the minimum number of ships needed to provide the kind of forces that we need in the oceans around this world, then the rate that we are building ships is not going to meet that threat in the foreseeable future. Is that an accurate statement?

Dr. **Borsting**. We will, I think, when we get our so-called 600-ship Navy be able to protect the sea lanes with our allies.

Senator **Rudman**. What year is that projected to come on?

Dr. **Borsting**. 1989.

Senator **Rudman**. You are talking 7 years. I am not sitting here and suggesting that we add $150 billion for the defense budget, but

I think it is important to bring out at some of these hearings the many different views as to what the threat is.

ACQUISITION INITIATIVES

I am interested in some of Mr. Carlucci's initiatives and where they in fact are at this time. One of the things that we talked about last year in light of cost growth was whether or not there was a point in procurement where a decision could be made institutionally that a particular system ought to be discontinued and to reach that point before we reached the other point in which the traditional viewpoint around here seems to be, well, we have already spent so much money on it that we really have to go and finish it regardless of the cost, which is understandable.

What is being done to pinpoint within the SAR reporting system, to pinpoint a thorough evaluation as to whether or not what the system was designed to meet still exists, (a), and (b), whether or not there is a cost attached to that which makes it essentially counterproductive to finish it?

Dr. BORSTING. Well, there are two things here.

One, we have tied the DSARC process, which is the process where we make the weapons system decisions, much tighter to the planning, programing and budgeting system so the dollars are tied together with the acquisition decision. They really weren't in the past.

Now in doing that last fall, the Defense Resources Board looked at, I believe 20 systems, that were potential new starts going into development. We looked at these very carefully and we deleted four.

Senator RUDMAN. Which were deleted, do you recall?

Dr. BORSTING. I can't recall the exact systems, but I can supply that for the record.

Senator RUDMAN. Would your various service people here recall which were eliminated? Say the Navy, what was eliminated with the Navy.

Admiral MILLER. We eliminated 28 programs. These are systems that were in R. & D. We eliminated such systems as Sea Fire, the procurement funding for the 5-inch guided projectile, but the R. & D. funds required to complete guided projectile developments are being expended as planned, we elminated a missile system and then the remainder tended to be alternative systems that would upgrade a major system such as an ejection seat development that we had for the A-7 aircraft, an engine development program that we had.

Senator RUDMAN. It seems to me that last year the only major system I recall being discontinued was an ASW system.

Admiral MILLER. Yes, that was restructured. The standoff ASW weapon system was combined with another program.

Senator RUDMAN. Was that the SOTAS system or do I have the wrong acronym?

Admiral MILLER. It was called the submarine ASW/SOW and was combined with the surface ship vertical launch ASROC (VLA) program now referred to as the common ASW standoff weapon (CASW/SOW).

Senator RUDMAN. SOTAS the Army eliminated, but you eliminated an ASW program.

Admiral MILLER. The submarine ASW weapon. It was a long-range ASW plan.

Senator RUDMAN. What has the Air Force done in terms of this evaluation of major systems or systems of any substantial nature which this process has essentially targeted as being ineffective to continue?

Mr. UMPHREY. I am not aware of any major systems and I am not sure of the small ones. I don't have that with me.

Senator RUDMAN. How about the Army.

General DELAUNE. If you will recall, Senator, we stopped production of the Roland last year. We cut the program at that time. We will finish out the program and get the 5 years they were in production so that we can get something back for return on investment there. In the year's budget the 8-inch antiradiation projectile was eliminated as a big item.

Dr. BORSTING. By the way, I have some others here that I will supply for the record. I think a 155 millimeter fire and forget was stopped, and also a space surveillance system Thor missile. We will check these.

[The information follows:]

Elimination of Marginal Programs

		TOA $ Millions Saved
I. ACQUISITION INITIATIVES	Appn.	FY 1983
G. Elimination/Reduction of Marginal Programs/Systems		
1. E-4B Procurement	APAF	278.7
2. EC-135 Airborne Launch Control Systems	APAF	22.8
3. Titan Missile Phase Out	MPAF	30.1
4. KC-135	APAF	-
	RDTEAF	10.3
5. B-52 Aircraft Modification	APAF	.1
	RDTEAF	7.0
	OMAF	-
	MPAF	-
6. Minuteman II	MPAF	-
7. Expendable Drones	RDTEAF	5.1
	MPAF	26.7
	MCAF	.2
	OMAF	.1
	MPAF	.8
8. Laser Acquisition	OPAF	-
9. 8" Anti-Radiation Projectile	RDTEA	13.0
10. AN/SPS-52 Radar	OPN	14.6
11. CHANNEL FINDER	OPN	-
12. Gun Fire Control Systems	OPN	24.1
13. SMS ORDALTS: TARTER	OPN	42.6
14. 5" GP	OPN	29.8
15. Advanced Base Function Components	OPN	10.0
16. Ship Systems Modifications	OPN	100.6
17. NOSS	RDTEN	87.9
18. Weaponizing Proto	RDTEN	3.0
19. SOJS (THOR)	RDTEN	22.3
20. CAML	RDTEN	5.7
21. Super Torch	RDTEN	3.2
22. VCX	RDTEN	-
23. TEWDS	RDTEN	6.9
24. MADAIR	RDTEN	3.7
25. Buried Manhunt	RDTEN	5.0
26. IIR Harpoon	RDTEN	39.8
27. HY 130 Steel	RDTEN	1.8
28. NDM	RDTEN	38.0
29. RECO	RDTEN	1.2
30. EMCARD	RDTEN	2.8

TOA $ Millions Saved

I. ACQUISITION INITIATIVES	Appn.	FY 1983
G. Elimination/Reduction of Marginal Programs/Systems (Con't)		
31. Mobile Trk Range	RDTEN	4.1
32. DASS	RDTEN	3.7
33. RFX	RDTEN	17.0
34. Dual Mini Sins	RDTEN	.5
35. A-6/AWSACS	RDTEN	22.4
36. Linear Chair	RDTEN	1.4
37. VLS ASROC	RDTEN	27.6
38. AEPS II	RDTEN	2.7
39. SEAFIRE	RDTEN	17.0
40. FIREBRAND	RDTEN	23.7
41. CH-46 Ext Tank	RDTEN	1.2
42. PCOTES	RDTEN	5.0
43. LINEAR ECM	RDTEN	7.9
44. Navy Future Comm	RDTEN	5.0
45. SXTF Closed	RDTEDA	22.6
46. Navy OSHA	MCN	11.0
	OPN	3.0
	OMN	3.0
47. H-46 Emergency Egress Mod	APN	1.7
48. H-46 AAR Mod	APN	1.4
49. H-46 Ground Prox Modification	APN	-
50. S-3 Ejection Seat Modification	APN	-
51. S-3 IFR Probe Modification	APN	1.7
52. S-3 TACAN EXCAP Modification	APN	1.2
53. P-3 TACNAV Mod	APN	30.9
54. 25 mm Gun Pod Mod	APN	-
55. ECM(ALR-45) Mod	APN	36.3
56. H-46 Fuel Tanks Modification	APN	-
57. F-4, APR-43 Modification	APN	4.8
58. F-4, APR-118 Modification	APN	3.5
59. A-6 (AWSACS)	APN	-
60. P-3C(Multi-Signal/ BITE)	APN	5.7
61. Terminal Guidance Sys	RDTEA	19.6
62. Smart Munitions	RDTEA	4.2
63. Field Army Surveying	RDTEA	--
64. Air Def Artillery JPO	RDTEA	1.9
65. Fire & Forget HELLFIRE	RDTEA	61.0
66. Explosive Demolitions	RDTEA	1.5
67. Tactical Display Sys*	RDTEA	2.8
68. Inf Anti-Armor Weapon*	RDTEA	88.1

I. ACQUISITION INITIATIVES	Appn.	TOA $ Millions Saved FY 1983
G. Elimination/Reduction of Marginal Programs/Systems (Cont)		
69. ROLAND	RDTEA	11.1
70. Standoff Tgt Acq Sys	RDTEA	51.5
71. Adv Missile Sys Demo	RDTEAF	7.0
72. AMRAAM Op Util Eval	RDTEAF	6.1
73. Adv Cruise Missile Tech	RDTEAF	21.1
74. Fuel Air Explosives	OPAF	--
75. JP-233 Airfield Atk Mun	RDTEAF	38.9
76. Combat Acft Proto Dev	RDTEAF	25.6
77. MX Integ Fuze & RES	RDTEAF	--
78. BMEWS L-Band Mods	OPAF	--
79. Adv Missile Propulsion	RDTEAF	9.5
80. F-106/B-52 Simulators	RDTEAF	--
81. Comp Trainer A/C (B-52).	RD/APAF	147.5
82. HAVE QUICK for SAC/MAC	OPAF	26.0
83. Ext Rnge Anti-Armor Mun	RDTEAF	23.9
Total, Addendum Items		547.3
Revised Subtotal (AX)		1,651.2

*Major restructuring, not a total cancellation.

PRODUCTION AND DEVELOPMENT DECISIONS

Senator **Rudman**. The staff has furnished me a list which lists a number of cancellations.

The reason I asked the question is for two reasons.

No. 1, there are substantial sums to be saved in the procurement budget. The question is how do you develop an early warning system, if you will, that a particular procurement is just going beyond what anybody originally planned. That is (a).

(b) It seems to me, that that now gives the Defense Department the needed credibility to eliminate its negative public image.

I wonder just whether or not you are enhancing your activity in this area because this is a very important area.

Dr. **Borsting**. It is, and let me elaborate a little bit more. Once a year, or maybe more depending on the timeframe, we look at new starts where I said we had dropped six at the last time, which I will supply for the record the exact details.

In addition, if you look at total cancellation of programs, which may even be before new starts, for example, canceling an R. & D. program even before you are thinking of going into production, you should find a listing of approximately 60 new starts and other things that have been canceled.

Now I at first was just talking about the so-called new starts where you are going to go into production, but if you talk totally there are about 60.

Senator **Rudman**. Of course, the production decisions are the other area which I was about to come to, and I would like to direct a question to the Army on this.

On the tank procurement plan what consideration has been given in the Army to do more conversions under the package now available for the M-60A3 as opposed to buying more M-1's in their present configuration since it is my understanding that there is now an evolution of the M-1 which is coming along? What thought have you given to getting more tanks on line rapidly with the same gun, the same essential firing system and obviously a different platform to carry it? What consideration has been given to that?

TANK CONVERSION

General **DeLaune**. Senator, we have a complete program to convert the M-60A1 and the M-60 series tank to the upgrade of M-609A3 and I will provide you the time lines of when this is all going to take place. We do have the program and there is money in the budget to continue the upgrading to the M-60A3 conversion.

Senator **Rudman**. It is my understanding that those conversions run at a cost of approximately a quarter million dollars per unit. Is that about accurate?

General **DeLaune**. Can I provide that for the record, sir?

Senator **Rudman**. You may. I will point out that it is my understanding that that conversion, and I have seen it and I have been in it and I have also been in the M-1 and seen its system, that the systems are essentially the same. They are the laser rangefinder system, the all-weather firing vision system, and the same gun. Obviously the tank is slower, in some ways not as reliable, older, and the armor is thinner. Nevertheless, at a quarter of a million dollars a copy you can get eight of those tanks out in the field compared to one M-1, but more importantly, you can get them out now.

What I am concerned about is not only the cost of the M-1 but how long it is going to be before the troops in the field have a tank that at least has got the latest kinds of firing systems.

I would like you to supply for the record how many of these we are going to convert because we do need a great addition to our tank forces, and my understanding of the rate of production of the M-1 right now is not very heartening. I would like for you to supply for the record also what the current production rate is on the M-1, the latest figures as of this month, if you would do that.

General **DeLaune**. Yes, sir.

[The information follows:]

Tank Program

Currently the M1 is in production at the Lima Ohio Tank Plant at a rate of 30/month. This month the Detroit Tank Plant will produce its first M1's and by November of this year we expect total M1 production to be at 60/month from both plants. Through fiscal year 1982 the Army has produced 1564 conversion kits for the M60. In fiscal year 1983 (fiscal year 1983$), the budgeted funds of $162.9 million will buy 453 M60 conversion kits. The average cost to procure a conversion kit in fiscal year 1983 (fiscal year 1983$), is about 350 thousand dollars. It costs over 150 thousand to accomplish the actual application of the kit for a total unit cost of over one-half million dollars.

LEADTIMES

Dr. **Borsting**. I might add, Senator, that we are talking through 1986 of converting to this configuration, the M-60A3, about 2,160 tanks.

Senator **Rudman**. I question whether or not that is enough and that is why I want the information.

Dr. Borsting, on the same general line of questioning the Secretary of Defense in his testimony here I believe it was last week, talked about the infantry fighting vehicle and the M-1 tank, as two examples, one which was 17 years in the development and the other 20. You mentioned in your testimony in an exchange with Senator Schmitt that there was progress being made in cutting down leadtimes.

Could you enlighten us a bit about that because if we are talking of shortening leadtimes we are obviously talking about reducing costs.

Dr. **Borsting**. Yes. I mentioned in my testimony that the leadtimes of scarce materials are dropping significantly for forgings for the tank or for other items, in aircraft buildups. Scarce materials are getting easier to obtain. I could give you some exact statistics for the record, and I don't have them with me, but they are dropping.

Major defense contractors in the aerospace industry have recently reported leadtimes as follows:

[The information follows:]

Items	Leadtimes in weeks	
	1979	Current
Titanium die forgings	92–105	38–48
Titanium extrusions	60–86	22–36
Titanium tubing	78	20–24
Titanium sheet, plate, and bar	101	24
Steel die forgings	78–80	26–40
Aluminium die forgings	104	22
Aluminium plate nonstandard	75	18–20
Standard	40	14
Aluminium extrusions	38	12

SURGE CAPABILITY

Senator RUDMAN. I believe there will be some other questions for the record. We are going to have the overviews of each of the military services, but I asked you these questions because I want your responses to compare with their responses, I want to see how closely they tie in together in terms of what we are trying to do here.

Dr. BORSTING. Could I mention something about the M–1 tank? One of the things we have been asking for in the 1982 supplemental, and Senator Schmitt in his preliminary remarks mentioned the supplemental, that we have added some money for a surge capability of the M–1 tank to certain of the longer leadtime items. We are asking for money to procure these so that we could increase for 6 months, very fast, at 30 tanks a month.

Senator RUDMAN. I think that is important. I just want to respond on that point, however, that based on the threat briefing from the Defense Intelligence Agency on Soviet tank production, that 30 tanks a month doesn't seem like a great deal and that is why I am speaking of a faster conversion rate of M–60A3's.

We all know that in a one-on-one confrontation they won't stand up too well because of their armor. But there is something to be said for having more armored vehicles as part of the whole integrated antitank warfare system that we have rather than waiting for these M–1's to come on line, assuming they work as they are supposed to.

Dr. BORSTING. We can look. I think we are planning on about 360 a year conversion of the M–60A3, but we can look at the total.

Senator RUDMAN. I just wonder whether or not that might be a better expenditure of resources, to spend some of the M–1 resources in the short term on M–60A3's and get them out in the field.

Thank you very much, Dr. Borsting. We will supply some questions for the record and we will forward to the Service Chiefs being here in the next several weeks.

SUPPLEMENTAL

Dr. BORSTING. Could I just make one final remark. I didn't quite finish my statement, which is fine, because I think we had an excellent discussion during the statement. I have made some remarks about the supplemental, but I would like to add a few things because I think it is important.

Senator Rudman. Well, I believe that if you want to do that, and we do have some questions on it at this time, so why don't you go ahead with that.

Dr. Borsting. We have requested a supplemental for fiscal year 1982 of $2.3 billion. The reason for this supplemental is that last year the Secretary said if the inflation estimates were not correct he would come back with a supplemental. This is what has happened. The inflation estimate for 1981, defense expenditures, is roughly $2.3 billion short and that is the reason for the size of the supplemental.

The supplemental is in several categories. One category, the direct result of inflation, is $519 million. It includes various fact-of-life things in military personnel, the retired pay and CPI adjustments that weren't funded, postal cost, and increased utilities.

There is a second item called indirect result of inflation, $803 million. Now these are some of the things that don't get funded because you have to fund other items like utilities in a budget, for example, real property maintenance.

REAL PROPERTY MAINTENANCE

There is an item in for $460 million of real property maintenance. That always gets postponed if you have other items that have to be funded. The Congress has wanted us to have a backlog of $2.3 billion on real property maintenance. At the moment the backlog is $3.9 billion. The Congress added some money last year for real property maintenance and we are adding in the supplemental, $460 million.

There is also another category called transfers from other Government agencies of $75 million, section 6 schools, veterans' education, and unemployment compensation. These were just transfers from other agencies, a small category.

NEW INITIATIVES

There is another category on new initiatives. The M-1 tank surge capability of $126 million is one of these items. There is another item for ABRV, a new warhead for the M-X system. The reason it is there is because of having to meet an IOC for the M-X missile. Otherwise, we would have put it in the 1983 budget.

Senator Rudman. Is there any chance that some of that money that we fenced that was originally supposed to be used for hardening and then the Congress said no, you won't use that for hardening, but it is still there. Couldn't some of that money be used for that item?

Dr. Borsting. It has been. That is where we found some of the funds for the workhead in our strategic plan for that. That is correct.

Now there is also $583 million for which various oversight committees have suggested supplemental or reprograming action be made.

I have summarized the supplemental quickly, and would be happy to answer any questions, but the basic reason was to make up for the loss of inflation in 1981 of $2.3 billion, and that is the size of the supplemental.

Senator RUDMAN. Any possibility that some of the nonpay items in there be deferred until 1983 in this supplemental?

Dr. BORSTING. There is always a possibility of deferring some. Real property maintenance, for example, usually gets deferred when you have crunches, but that is one of the problems because it can be deferred and that necessitates more money in the long run to solve these problems.

REAL PROPERTY MAINTENANCE

Senator RUDMAN. Let me just ask you this question then. We are now in March. If we do this, what about this $460 million you are talking about for real property maintenance in the supplemental?

Dr. BORSTING. It can be spent if it is given to us fairly late in the year because plans are already made.

Senator RUDMAN. Is this servicewide?

Dr. BORSTING. It is servicewide, but the bulk of it is in the Army.

Senator RUDMAN. Let me ask Admiral Miller something. I was down at Pensacola 2 weeks ago and went through the facilities down there and I frankly was shocked at the antiquity of some of the facilities at Pensacola which is after all our flight training center for the Navy. Some of the training squadrons had facilities that were really antiquated. They did a very good job of keeping them clean and painted but they really were in pretty tough shape. Is there any money in your budget to start improving those facilities?

Admiral MILLER. As a matter of fact, I couldn't have planted the question better. [Laughter.]

Senator RUDMAN. Well, nobody planted it. The commodore down there planted the question.

Admiral MILLER. Actually we have $75 million in our budget in the supplemental for increased real property maintenance that didn't get taken care of last year; and $7 million of that is earmarked for CNET. Of this amount, $1.6 million is for the Pensacola area within the CNET Command.

Senator RUDMAN. For the training wings down there?

Admiral MILLER. Yes, sir, for the entire CNET Command.

Senator RUDMAN. Considering that that is the center of naval aviation and we are talking about the number of carriers we are going to have and the amount of money we are spending on aircraft, it certainly seems to me that the facilities to maintain them ought to be a little bit more modern than the ones we have down there.

Dr. BORSTING. As a visitor to Pensacola in the past, I can collaborate your feeling, Senator Rudman.

Senator RUDMAN. Well, Dr. Borsting, let me ask you just one last question, something we have talked about here in the committee, and I would just like to have your answer on the record.

APPROPRIATIONS IN EXCESS OF AUTHORIZATION

It is our understanding that the Department is sitting on some of the 1982 fiscal year appropriations enacted by the Congress because they exceeded the limits of the authorization bill. This is obviously a problem and you are to some extent victimized by it. We understand the delay is at the request of the Armed Services Committees of the House and Senate. Is that accurate?

Dr. **Borsting**. That is correct.

Senator **Rudman**. And you are holding based on that?

Dr. **Borsting**. That is correct.

Senator **Rudman**. Do you have a legal opinion from within the Defense Department yet that addresses that?

Dr. **Borsting**. Not a definitive legal opinion. We are hoping that the four committees of the Congress can work out their problem.

Senator **Rudman**. That would be nice. [Laughter.]

Well, you know, we could get into a long legal discussion here about appropriations bills and authorization bills. The rule of law that generally is applied of course is that the later legislation passed has the effect of law modifying our previous law passed by the entire body. That is certainly the law as I understand it, but obviously you are between a rock and a hard place.

Dr. **Borsting**. The authorization lawyers say that the law that says "thou shalt not obligate" has the effect of——

Senator **Rudman**. Well of course, you know, being a lawyer I can tell you that you can get a lawyer to give an opinion that will say almost anything. [Laughter.]

Senator **Schmitt**. Well, Mr. Secretary, I hope that we don't leave it at that because there are some very important things that aren't being done as a consequence of this little battle. Whatever the authorization committee lawyers may say, the fact is that an amendment to an appropriations bill or an appropriations bill language has the same effect of law as an authorization. There really is no argument about that and it is purely an issue of jurisdictional priorities over here in the Congress.

I am very disappointed in the attitude of the Department of Defense. Even though I understand it, I am still disappointed that you are not following through on the direction of the Congress. Independent of what two committees may think, it is the direction of the Congress. The points of order could have been raised or could have been passed if they were raised but were not. It is a matter of law that there are items not being done by the Department of Defense that they were directed by the Congress to do and by the President by signing that bill.

So I think you are on very weak ground. I know the authorization committee would say just the opposite. You are not only on weak legal ground, maybe nonexistent legal ground, but you are hurting some very important programs in our national defense effort by playing this kind of game.

Senator **Rudman**. Senator Schmitt, could I just say that I agree with your legal conclusion completely. I would only add that I do think we have some obligation here to try to do what we can do to settle this in a way other than confrontational. I can imagine that over at the Department of Defense I think they probably know the law as well as we do. I think they are hoping that there might be some way to compromise this before they run into a confrontation which they just can't win. So I agree with you completely, and I agree with all your statements on the law and what it means and what they ought to do, but I would think that we might be able to do something also.

Senator **Schmitt**. Well, I hope you are right. But in the absence of that action, I think you and I and the chairman of the subcommittee are dedicated to working out the problems we may have over here. I think it would be safe to say that the appropriations that are not being spent are subject to the provisions of the Impoundment or the Control Act and in that context, unless deferral or rescission proposals are soon forthcoming, you are in violation of that act by not expending these moneys.

Dr. **Borsting**. I understand, Senator.

Senator **Schmitt**. Would you agree with that assessment?

Dr. **Borsting**. I agree there is a potential problem.

Senator **Rudman**. I have no further questions at this time. I don't know whether Senator Schmitt has any other questions or not.

Senator **Schmitt**. I think you are correct, Senator Rudman. I do hope that we can fairly quickly get some of the information that we asked earlier for the record because it would be very useful in helping to provide a broader public understanding of just why this budget is as large as it is and why it is very difficult to reduce it without significantly impacting readiness. At least in the short term the so-called big ticket items do not affect the outlay picture significantly even if they were deemed to not be necessary by the Congress. I of course would not agree with that assessment on several of them, but nevertheless that is a decision the Congress can still make if they so choose.

It is particularly critical as the situation in the Caribbean continues to deteriorate and as we have our national interests threatened in other parts of the world to maintain a rising and rapidly rising level of overall readiness. I would hate to see the Congress do anything under the guise of budgetary reform that would affect that particular area of our national activities. There are certainly many other areas that we can use to handle the basic problem of deficits besides a further deterioration of the readiness of our Armed Forces.

Do you have anything else, Senator?

Senator **Rudman**. No.

Senator **Schmitt**. Thank you, Mr. Secretary.

Dr. **Borsting**. Thank you.

SUBMITTED QUESTIONS

Senator **Schmitt**. We will submit to you, Mr. Secretary, additional questions, from the committee. The question, with the answers, will be inserted in the record at this point.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

Additional Committee Questions

Major Program Growth

QUESTION: Your statement indicates the heaviest real growth is in the investment sector of the budget. What is real growth for investment and how does it compare to the growth for operations and research and development? Supply detailed growth estimates by appropriation title for the record.

ANSWER: The following table shows the TOA for each appropriation title in billions of constant FY 1983 dollars. The column labeled Change FY 82-83 represents the real growth from FY 1982 to FY 1983.

	TOA (FY 83 Constant Dollars, billions)		
Military Program	FY 1982	FY 1983	FY 82-83
Military Personnel	46.3	47.9	+ 1.6
Retired Pay	16.0	16.5	+ .5
Operation and Maintenance	66.3	70.4	+ 4.2
Procurement	69.8	89.6	+19.8
RDT&E	21.2	24.3	+ 3.1
Military Construction	5.3	5.4	+ .1
Family Housing	2.4	2.8	+ .4
Revolving & Management Funds	.5	.9	+ .4
Total Military Functions	227.8	258.0	+30.2

Major Program Growth

QUESTION: How does this estimated real growth allocate among the military services? Does any one service enjoy a more substantial growth than others?

ANSWER: The following table shows the TOA for each military department and for the Defense Agencies/OSD and Defense-Wide in billions of FY 1983 constant dollars. The column labeled Change FY 82-83 represents the real growth from FY 1982 to FY 1983.

TOA
(FY 1983 Constant dollars, billions)

	FY 1982	FY 1983	Change FY 82-83
Army	56.4	62.3	+ 5.9
Navy	74.1	89.3	+15.3
Air Force	69.9	79.6	+ 9.6
Defense Agencies/OSD	8.4	9.8	+ 1.3
Defense-Wide	19.0	17.1	- 1.9
Total	227.8	258.0	+30.2

Long-term Defense Needs

QUESTION: More and more public concern is being directed toward our long-term defense requirements. High-ranking military representatives have testified, in fact, that we may be $750 billion short of funding needed for our growing global commitments. Is this a valid concern in your judgment?

ANSWER: The forecasting of global commitments and the resources to meet them is subject to even greater uncertainty than are most other forecasting efforts. If the economic assumptions are held constant, uncertainty in the estimates of resource requirements may still result from differing projections of the evolving threat and of the acceptable level of risk in countering it. In the strengthened planning process, we have worked to explicitly address these combined uncertainties and to develop force structure and financial plans that minimize them. Although I am not surprised at the existence of such concerns, I do not share them. The budget and the long-term plans which it supports are unlikely to be so short of the mark. On the other hand, I must counsel that a great deal rests on our ability to maintain a consistent well-planned Defense buildup without the stop and go budgets so typical of past Defense efforts.

Defense Missions

QUESTION: How can we relate this budget and your five-year projections to our defense missions? Do you have any budget scenarios of this kind?

ANSWER: Defense mission analyses are important parts of the programing and planning phases of the PPBS. The budgeting phase, however, is primarily involved with adequate pricing, affordability and justification of the programs which evolve in the planning and programing phases. These programs as supported by the FY 1983 budget are oriented to improving our conventional force readiness and sustainability, improving mobility by sea and by air, providing adequate quantities of effective combat systems, building a stronger and larger Navy, and to strategic initiatives.

Southwest Asia Costs

QUESTION: Can you break out how much of this budget and the five-year funding projection is devoted to our military commitments in Southwest Asia? Is there any way we can get at the total cost in terms of dollars and force expansion involved in this commitment?

ANSWER: We do not construct our budgets by geographical area, primarily because of the extensive interrelationships between our force elements and concepts which allow their application in any of several geographic areas. Arbitrary cost allocations to geographic areas would be misleading in terms of the marginal costs of changing commitments. However, we are preparing an estimate of the costs of the Rapid Deployment Joint Task Force, which is assigned operational planning responsibility for the Southwest Asia area, and will furnish that estimate when it is complete.

FY 1983 Budget--NATO Cost Estimates [1]

QUESTION: Similarly, what is the cost of our continuing force commitment to NATO? Do you have annual projections in this area?

ANSWER: The following table provides an annual update of the NATO cost estimate in the FY 1983 budget:

Table I - FY83 TOA Summary

		FY83 Costs ($ Billions)
I.	Cost of U.S. Forces Planned for NATO: This is the cost of forces that DoD plans to use in the event of a NATO conflict. The combat forces for each Category are taken from current DoD plans and NATO planning assumptions.	
A.	FORCES RAPIDLY AVAILABLE TO NATO: Includes general Purpose Forces and support elements forward deployed in Europe and general purpose forces that are ready to rapidly deploy to counter Soviet aggression. The latter are mainly based in the U.S. and in general would be withheld from deployment to contingencies elsewhere.	87.5
B.	MULTIPURPOSE FORCES: Includes general purpose forces that would be used in a NATO conflict, based upon current Defense Department planning, but some of these could be available for conflicts in other areas; Strategic Reserves, Strategic Forces, Intelligence and Central Communication activities.	129.8
C.	FORCES FOR OTHER CONTINGENCIES: Includes the remaining general purpose forces, which are mainly forward deployed in other regions of the world to meet the needs of other contingencies. These forces would all be involved in the general conflict with the USSR which would accompany the outbreak of hostilities in Europe -- they could be redeployed to Europe or may engage the USSR in some other area.	24.2
D.	UNALLOCATED COSTS: Includes DoD retired pay.	16.5
	DoD Total	258.0
II.	Cost of U.S. Forces Formally Committed To NATO: This is the cost of forces formally committed in the most recent U.S. Response to the NATO Defense Planning Questionnaire. (DPQ).	133.2

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[1] The costs include, in addition to the direct costs of the combat forces in each group, an allocated share of the costs of new equipment, a proportionate share of U.S. based training and logistics support, RDT&E and DoD administration.

Force Modernization

QUESTION: Army force modernization costs have burgeoned from $27 million in support of 29 systems in FY 1980 to over $920 million for 119 systems in FY 82. Preliminary estimates indicate that over $2.6 billion will be required by 1986 to support new weapon systems.

What are we doing to foresee and control O&M support requirements during the development and procurement cycles?

ANSWER: Several management techniques are being used to identify and control O&M support requirements. These techniques are being applied in both the acquisition review and planning, programing and budgeting management systems at the OSD and Service levels.

The acquisition procedures of DoD Instruction 5000.2 require a review of weapon system support requirements, readiness objectives and operating and support funding at each development and production milestone. The Cost Analysis Improvement Group also reviews weapon system operating and support costs.

The DoD Acquisition Improvement Program provides for early identification of system support requirements. It also strengthens system support review procedures. During the FY 83 budget review, new procedures were used to review support requirements for a selected number of systems about to be fielded. The increased visibility provided to support requirements and funding levels should strengthen our ability to define and control weapon system support requirements.

Price Escalation Indices

QUESTION: Please supply for the record the inflation rate assumptions of the 1983 budget by title and by appropriation account and program where substantial variations are involved at these levels. Compare these rates to the assumptions in the 1982 budget.

ANSWER: The following tables provide a comparison of the underlying inflation assumptions used in formulating the FY 1982 and the FY 1983 budget.

FY 1982 Budget

Price Escalation Indices

Outlays

Fiscal Year	(Proc. excl. SCN)	SCN	RDT&E	MilCon FH Const.	(O&M excl. Fuel)	Fuel	Mil Pers Non-Pay
1979-80	9.7	10.1	9.4	10.4	9.7	80.6	7.0
1980-81	7.93	7.93	7.93	7.93	7.93	26.6	24.1
1981-82	8.7	8.7	8.7	8.7	8.7	8.7	21.6
1982-83	7.3	7.3	7.3	7.3	7.3	7.3	6.3
1983-84	6.2	6.2	6.2	6.2	6.2	6.2	6.2
1984-85	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1985-86	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1986-87	5.0	5.0	5.0	5.0	5.0	5.0	5.0

FY 1983 Budget

Price Escalation Indices

Outlays

Fiscal Year	Major 1/ Commodity Procurement	All Other Procurement	RDT&E	Mil Con FH Const.	(O&M excl. Fuel)	Fuel	Mil Pers Non-Pay
1980-81	11.9	11.9	11.9	11.9	11.9	18.4	24.1
1981-82	9.6	9.2	9.2	9.2	9.2	1.2	9.2
1982-83	8.5	7.0	7.0	7.0	7.0	2.1	7.0
1983-84	7.3	5.1	5.1	5.1	5.1	5.5	5.1
1984-85	7.5	4.73	4.73	4.73	4.73	5.8	4.73
1985-86	6.5	4.53	4.53	4.53	4.53	5.7	4.53
1986-87	6.5	4.44	4.44	4.44	4.44	5.6	4.44

1/ Major commodities include: Aircraft
Missiles
Weapons
Ships

OUTLAY PROJECTIONS

QUESTION: Dr. Borsting, you are probably aware that the Congressional Budget Office has reestimated outlay projections in the President's budget. In the defense budget particularly, CBO is estimating outlays will run some $2 billion higher, much of it in the procurement area. Are you familiar with these reestimates? What are your observations?

ANSWER: I am familiar with the CBO reestimate of the defense spending for FY 1983. The CBO estimate is $1.8 billion or 8/10th of 1 percent higher than the DoD estimate of $215.9 billion.

Having reviewed their reestimate, we still believe our projections remain firm. The Department's estimates of past spending have proven to be extremely accurate given the inherent uncerntainties involved in making estimates over nine months before actual spending begins.

QUESTION: Some of CBO's reestimates are based on more pessimistic economic assumptions, but the bulk are technical reestimates -- historic spendout patterns, the impact of multi-year procurement, and so forth. And we are told CBO has a better track record than you folks in projecting these outlays. At what point in the current fiscal year do you think sufficient new spend-out data will be available to help establish more reliable outlay estimates?

ANSWER: I consider our estimates very reliable at this time. However, as is done each year, we will reexamine our spending estimates during the summer. At that time, we will take into consideration actual spending to date and known congressional action on the President's FY 1983 budget request to include the FY 1982 supplemental, economic conditions at the time, and any other factor that influences spending projections.

QUESTION: Let's examine the front-end funding initiative in the 1983 budget. In addition to more realistic inflation rates, you tell us you are budgeting for program reserves to cover unbudgeted program costs. Won't the establishment of a cost overrun reserve in effect serve to drive up costs -- the self-fulfilling prophecy syndrome?

ANSWER: We have indicated that the FY 1983 budget request reflects $12.8 billion related to acquisition initiatives. Up-front funding relates to the investment of $546 million in FY 1983 which will ultimately end up in a net savings of $806 million. This effort is only one of eight categories of acquisition initiatives. Of the remainder, only one is appropriate for description as program or cost overrun reserves. The Army has initiated, and Congress has accepted, a Total Risk Assessing Cost Estimate (TRACE) to explicitly address program uncertainties in the development of RDT&E budget estimates. A total of $87.1 million is requested in FY 1983 for 12 Army RDT&E programs to provide program and cost stability.

Also, in an attempt to quantify uncertainty in line with the TRACE concept, the Navy has budgeted $143.6 million in the FY 1983 request for production of 9 aircraft programs.

There is a danger that such fund availability might encourage a more costly treatment of problems that might be solved in other ways. However, we firmly believe that the cost and schedule ramifications of more stable programs more than outweigh this risk.

QUESTION: Wouldn't it be more effective to budget tightly for program costs and institute management controls that would resist continual overruns?

ANSWER: On those programs which do not involve technological risk, the answer is a most emphatic yes. However, we believe that where such risk is a certainty, we should face up to it and either cancel the effort or adequately fund for it. Again, we firmly believe that the cost and schedule ramifications of more stable programs more than outweigh the chance that the funds will not be used effectively.

QUESTION: If the Congress made large contingency funds available as requested in the budget, what kind of discipline could be imposed to curb program and cost growth? Will any of the acquisition reforms touched on in your statement provide effective control?

ANSWER: The reserves or contingency funds included in our initiatives are limited in amount. The new efforts related to technological risk total $230.7 million and are requested to provide program stability and proper costing. Program and cost growth control will be enhanced by this initiative. However, all of the acquisition initiatives will help in achieving the goal of stable programs and, hence, curb program and cost growth. None can work effectively unless all of us can agree on a stable approach to acquisition of those weapon systems which must be provided to insure our future security.

Defense Resource Board Expansion

QUESTION: Speaking of acquisition reforms, how will expansion of the Defense Resources Board provide better management? Isn't it likely to go the other way?

ANSWER: The expansion of the Defense Resources Board to include the Services Secretaries enhances the information flow between the top managers of the Department of Defense and the Military Departments. A major element of that enhancement is the quicker and more comprehensive exchange of information between those top managers. The opportunity for exchange of information and perceptions on an immediate basis, as part of a dialogue in which the comments or remarks of one board member may prompt or trigger those of another, leads to a fuller understanding of the interrelationships of each of the programs and Services and to a stronger commitment when decisions are reached. Those understandings and commitments are important, both in reaching the decisions and in the decentralized execution of them. As a result, we expect the quality of the initial decisions and their execution to be improved. These improvements and the resulting increased stability in the acquisition program play a major role in the acquisition reforms.

"Multiyear Contracting"

QUESTION: To what degree is the budget recommending forward funding for multiyear contracts? Is there a fixed policy for the Defense Department or are there variations?

ANSWER: Of the 13 new multiyear initiatives included in the FY 1983 budget request, forward funding is proposed for 12. The budget includes an extra $513.5 million for the initiation of the multiyear contracts for these 12 systems. The exception to the forward funding policy is the NAVSTAR Global Positioning System, which has been proposed for incremental funding because of the unique nature of the program. It is the Department's intention to propose forward funding in most cases.

QUESTION: In both multiyear contracting and economical production rates, how do you avoid over-commitments to certain weapons systems? How can long-term obligations of this level accommodate changing military and economic conditions?

ANSWER: From the standpoint of any risk of over-commitment to weapons systems, multiyear contracting and economic production rates represent different circumstances. The pursuit of economic production rates does not entail a forward funding commitment such as exists for multiyear contracting. Hence, an economic production rate does not represent any threat of over commitment to a weapons system to any greater degree than exists for any other weapons system. Since production plans are based on the military need for the weapons system, the economic production plans do not exceed the scope of the military need, as is the case for other weapons systems.

In the case of multiyear contracting, changing military needs and economic conditions are considered in two ways. First, a criteria for selection of a system for multiyear contracting requires a stable military need. Hence, the selection process tends to limit the candidates to those whose risk of change is small. Second, the Department is forward funding the long lead components for the multiyear programs in order not to create large unfunded contract cancellation charges. Since such large unfunded charges are absent in the present multiyear initiatives, there will be greater latitude for the Department and the Congress to alter these multiyear contracts if it is absolutely necessary.

As for changes in economic conditions, the multiyear contracts will, in many cases, be drafted with escalation clauses which adjust the contract price up or down depending on economic circumstances.

Pay Costs

QUESTION: Several major labor unions have been negotiating pay freezes in exchange for job security during these difficult economic times. Some will argue that federal personnel should give up their 5 percent and 8 percent military pay raises scheduled for fiscal year 1983. Has the Department given any serious consideration to this idea and the $4.3 billion outlay savings that would accrue?

ANSWER: No, we have not. Deferring civilian pay raises in FY 1983 would have a deleterious impact on civilian workforce morale. Personnel could feel that they were being unfairly targeted with bearing additional sacrifices to balance budgets. The different employee unions have already made statements along this line. Civilian productivity needed to effectively accomplish the increased Defense program would be impossible to maintain. If action was taken at this time to eliminate the FY 1983 military pay raise, it would certainly constitute an erosion of adequate military compensation. Perhaps more importantly it would also be viewed by our military members as a breach of faith from the recent attempts to recognize the personal hardships they and their families tolerate in pursuit of a military career. This action could undo the recent successes we have enjoyed in attracting high quality recruits and keeping our higher quality members.

QUESTION: In the absence of any government-wide pay freeze policy, has the Department considered holding military pay raises to the 5 percent cap applied to civilians? What would be the estimated outlay savings that would accrue from that move?

ANSWER: A 5 percent pay raise cap applied to military personnel would save an estimated $1.1 billion in outlays in FY 1983. We have not considered holding the military pay raise to the 5 percent proposed for civilians. The 8 percent pay raise proposed for military personnel not only maintains the level of adequate compensation that has been established in recent years but recognizes the personal hardships members and their families tolerate in pursuit of a military career. We believe the corner has been turned on resolving problems with recruiting and retention. The gains made in recent years should not be jeopardized by a return to arbitrary pay caps.

QUESTION: Recruitment and retention are up, yet the FY 83 budget reflects a $142 million increase in active and reserve enlistment and reenlistment bonus funding. Why can't we cut these bonuses?

ANSWER: Recruitment and retention are up because of recent improvements in military pay and allowances and because we provide enlistment and reenlistment bonuses for critical military occupation specialties. The funding level for these bonuses is designed to attract increased numbers of enlistments in the combat arms and other hard to fill skills, achieve greater personnel readiness, and provide the experienced base necessary to man expanded force levels. A reduction in these bonuses could undermine our efforts to attract enlistments into critically short skill areas and degrade our ability to sustain a high quality career force at levels needed to meet expanded force structures.

Reprograming

QUESTION: In Fiscal Year 1981, the Air Force reprogramed almost $70 million from the military personnel account. Similarly, about $60 million in the military pay of Navy personnel was used for reprograming last year. What has been done to prevent future overbudgeting in the pay accounts?

ANSWER: The Air Force submitted $74 million in reprogramings during FY 1981 using Military Personnel, Air Force appropriation funds as the source of financing. A decrease in overseas station allowances because of the strengthening of the dollar overseas decreased requirements by $39.5 million. Then a policy change in the permanent change of station (PCS) travel account reduced PCS costs by $34.5 million by permitting overseas personnel requirements to be filled with more junior individuals at a less expensive rate per move. The impact of these changes was projected into FY 1982 and the October 1981 amendment to the FY 1982 DoD appropriation request reduced the Military Personnel, Air Force appropriation by $74 million because of these actions. These changes have also been included in the FY 1983 DoD appropriation request.

At the time that the initial FY 1981 estimates were derived, actual FY 1979 data was utilized; the subsequent FY 1981 estimates in the FY 1982 submission were based on updated FY 1980 actual experience including increases and decreases in various items of pay when compared with the initial request. Taking this into account, personnel plans were developed to coincide more closely with actual performance, and the 1983 budget estimates were based on performance of the new, recently passed, pay items. For Navy, the following table, which reflects the amounts available and the amounts not utilized for the pay and allowances portion of the appropriation, indicates a significant improvement in the accuracy of the Navy's funding estimates.

($ Millions)

Fiscal Year	Available	Unobligated	% Unobligated
1977	5,799.9	56.5	0.97
1979	6,477.0	28.4	0.44
1981	8,355.4	3.5	0.04

The measures that have been taken to relate current estimates to recent actual experience should prevent future overbudgeting.

Force Expansion

QUESTION: In fiscal year 1983, active military strength increases by 69,000 over 1982 in order to meet planned force expansion. What are the long-term cost estimates of this force expansion if we continue to stress pay comparability with the civilian market?

ANSWER: The Defense programs increase active military strength by 37,000 in FY 1983 over FY 1982 active military strength levels. The budget and five-year forecast incorporate military pay increases which are projected on the basis of continued comparability with the civilian market. Those projected increases are: 8 percent from FY 1982 to FY 1983, 7.6 percent from FY 1983 to FY 1984, 5.5 percent from FY 1984 to FY 1985, 5 percent from FY 1985 to FY 1986, and 5 percent from FY 1986 to FY 1987. On that basis, total military pay costs would rise from approximately $48 billion in FY 1983 to approximately $64 billion in FY 1987.

Readiness and Training

QUESTION: Given the high cost of expanding and modernizing the All Volunteer Force, how do we know that the readiness and training of the existing force will not suffer? Can we afford such force growth when personnel and equipment shortages already exist in the present structure?

ANSWER: Readiness and sustainability have received major emphasis in the preparation of this budget. Special attention has been given to improving the training of the existing force, because such training is a major element of readiness, and to assuring that sufficient material is available in the event military actions must be undertaken. The expansion and modernization plans include readiness and sustainability provisions for the total force. As examples, I would note the increases in the ammunition procurement and in flying-hour rates.

Retired Pay

QUESTION: The Administration has budgeted an $88.5 million savings in retired pay based on legislation that must still be approved by the Congress. How do you think this will affect recruitment and reenlistments?

ANSWER: We do not expect the retired pay initiatives included in the President's Budget to adversely affect recruitment and reenlistments. They are intended to parallel adjustments in other federal entitlement programs.

QUESTION: A recent CBO report estimates a five-year savings of $460 million if high three averaging were applied to all military retired pay. Likewise, $3.8 billion could be saved over five years if retired personnel under age 60 received only half the regular cost-of-living allowance increase, with a catch up raise at age 60. Has the Department of Defense considered these options as a means of cutting costs?

ANSWER: The Administration studied a number of different proposals for reducing the cost of military retired pay and determined that four new initiatives were appropriate for inclusion in the FY 1983 Budget. These proposed changes are estimated to save $89 million. They are:

- o Rounding payments to retirees to the lowest dollar.
- o Eliminating the one-year "look back."
- o Holding annual retired pay adjustments to the lower of the CPI change or the military pay increase.
- o Limiting annual adjustment to retirees to align their retired pay more closely with what they would

receive if they retired today at the same grade and longevity step.

These initiatives parallel changes in other federal entitlement programs. The changes in the CBO study could be perceived by the military as an erosion of benefits.

QUESTION: When does the Department plan to propose legislation to budget retirement costs when they're incurred? What increase in budget authority would be required in FY 1983 if that change were adopted?

ANSWER: The Department has submitted legislation to the Office of Management and Budget (OMB) which would initiate accrual accounting for the cost of military retired pay. OMB is coordinating this proposal with other government agencies.

Based on an actuarial valuation of FY 1980 actual data, we estimate that budget authority for the Federal Government would increase by about $10 billion in FY 1983. Outlays would remain unchanged.

QUESTION: With the Consumer Price Index coming in at 8.7 percent instead of the budgeted 8.9 percent, how much funding can be reduced in 1982 and 1983 fiscal years for retired pay?

ANSWER: Fiscal Year 1982 can be reduced by $16.7 million and FY 1983 by $28.6 million.

Supplemental

QUESTION: How much of the proposed program supplemental can be classified as "must pay" items that will require absorption if no additional funds are available?

ANSWER: Absorption can be detrimental and costly to our on-going 1982 programs. To isolate "must fund" from the total package implies that a part of the supplemental is "nice to have." This is inconsistent with the basic concept of our program supplemental request.

We are currently experiencing the effects of increased costs to the Department, such as utility rate increases, postal increases, etc. These increased expenses are being incurred now. Failure to provide for the discretionary authorities in our military personnel appropriations will impact on the gains we have made in recruiting, retention and morale of our military members. The lack of additional funding would require us to absorb or reprogram from other approved programs and hamper our efforts to accomplish the goals established by Congress for 1982.

I urge the consideration of our supplemental on the merits of each program, rather than to categorize our request.

Increased Utility Costs

QUESTION: The O&M supplemental requests funding for programs common to most of the Services. However, only the Navy is requesting $52 million for increased utility costs. With declining fuel prices, why is this a problem and why is it exclusive to the Navy?

ANSWER: The Navy has experienced utility rate increases in FY 1980 and FY 1981 in excess of 30%. This cost growth parallels growth in oil prices on the world market. These increases created an underfunding problem for the Congress provided additional supplemental funds in FY 1981. Since the FY 1982 budget was submitted before this shortfall was recognized, a "catchup" situation exists because the FY 1982 financial base was not adjusted to reflect prior years actual cost growth. Some examples of the unprecedented cost growth experienced relative to utility rates are: Honolulu +45.5 percent; San Diego +70.0 percent; and San Francisco +37.8 percent. The funds requested are required in order to avoid program adjustments which will otherwise be required in order to finance the higher than budgeted utility costs.

TRANSFERS BETWEEN PROCUREMENT AND R&D

QUESTION: Dr. Borsting, the Department is requesting more flexibility in shifting funds between the Procurement and Research & Development accounts. The specific proposal is to permit transfers between these accounts without the requirement for a prior approval reprogramming.

How many such transfers have occurred in the past three years? And what delays were associated with gaining Congressional approval for these transfers? (Details for the record.)

ANSWER: In a strict interpretation of moving procurement funds to R&D for the same program, we can identify three instances in the last three years. $5.6 million was reprogrammed from SCN to RDT&E, Navy for maritime prepositioning ship development effort, $14.2 million was reprogrammed from Missile Procurement, Air Force to RDT&E, Air Force for a classified program, and $66.1 million was reprogrammed from Missile Procurement, Air Force to RDT&E, Air Force for the air launched cruise missile. The average length of time it took to get Congressional approval was 45 days.

QUESTION: What would be the purpose of maintaining separate accounts for Procurement and R&D if the Department were to be given unlimited transfer authority? Why not simply write combined accounts and be done with it?

ANSWER: The increased flexibility we are seeking under this Carlucci initiative is limited to transfer of funds from a specific procurement program to the same RDT&E program. We are not proposing any change to the normal reprogramming requirement where funds are transferred from some procurement program to a different RDT&E program. We do not seek unlimited transfer authority.

QUESTION: What opportunity would the Congressional committees have to object to any unwanted transfer under the arrangement you are proposing?

ANSWER: The specific notification procedures have not been definitized because the Committee would play a role in that decision. There are several ways for us to notify you of planned transfers and there would be opportunity for the Committee to oppose any specific transfer.

QUESTION: Won't the recently increased reprogramming thresholds help ease the reprogramming workload sufficiently without this additional authority you seek for Procurement and R&D?

ANSWER: The increase in reprogramming thresholds is a significant help in our ability to execute defense programs on an efficient basis. However, it is not considered to be a meaningful substitute for the limited transfer authority we seek in our proposal. Reprogramming from one or more sources to other programs is seldom accomplished without difficulty. Either the resources are hard to find or they involve politically sensitive programs. In any event, our proposal would keep the problem solving on a given program within the confines of that program by adjusting between procurement and R&D funds as the program progress dictated.

Projected Economic Growth

QUESTION: First, what kind of economic growth assumptions are you using in forecasting defense spending as a share of the GNP?

ANSWER: The following economic growth assumptions are used in forecasting defense spending as a share of GNP:

Fiscal Year	GNP Bil Current $	Percent Change	GNP Bil Constant 72 $	Percent Change
1981	2,858.6	11.3	1,507.1	1.7
1982	3,082.9	7.8	1,501.5	-0.4
1983	3,433.6	11.4	1,570.9	4.6
1984	3,791.9	10.4	1,650.5	5.1
1985	4,163.5	9.8	1,729.9	4.8
1986	4,550.8	9.3	1,807.6	4.5
1987	4,961.1	9.0	1,885.2	4.3

DoD as Percent of GNP

QUESTION: A 1987 level of 7.2 percent of the GNP compares with some of the high Vietnam years. Why can't defense spending be held to a lower share of the GNP?

ANSWER: We do not believe that the Department of Defense is automatically entitled to some percentage of the GNP. However, the magnitude of the current Defense buildup is necessary largely because of the shortcomings in prior years. Throughout the 1970's the nation devoted the lowest share of the total output of goods and services to Defense since the end of World War II. The current buildup involves planned and orderly increases in Defense capabilities and should not disrupt the economy. The increases in the percentage of GNP allocated to Defense shows a gradual increase from 5.9 percent in FY 1982 to 7.2 percent in FY 1987. This percentage, of course, will be lower if the economy grows more than the planned 4.5 to 5.0 percent each year.

Allies' Defense Spending as Percent of GNP

QUESTION: How does the current and forecast spending levels of U.S. defense as a percentage of GNP compare with those of our European and Japanese allies?

ANSWER: The U.S. percentage of GNP allocated to Defense in FY 1982 is 5.9 percent. This compares to a NATO average (excluding the United States) of about 3.5 percent. Japan currently spends less than one percent of the nation's GNP for defense.

QUESTION: Defense outlays as a portion of the total federal spending also seem to grow excessively, rising to 36.4 percent by 1987. How does this compare to our allies' spending?

ANSWER: In the current year, FY 1982, U.S. Defense spending represents 25.2 percent of the total Federal outlays. This percentage is expected to increase gradually to 36.4 percent by FY 1987. Defense expenditures in NATO Europe currently represent about 15 percent of the total budget. The long range forecast for these countries is not available.

Impact on Unemployment

QUESTION: Do you see increased defense spending providing any relief in overall unemployment rates, particularly among the less skilled portion of the labor force?

ANSWER: We expect the increased defense spending to result in defense-related employment increases of approximatey 347,000. The initial and direct increases probably will be primarily in skilled labor with indirect impacts among the unskilled labor force. In addition, to these indirect or second-order effects on the unskilled labor force, there may result some increased opportunity for entry into the skilled labor force as demands stabilize at the higher level and the civilian economy recovers from recession.

Defense Buildup

QUESTION: Many leading economists say increased defense spending exerts a negative force on the economy, a position you appear to dispute. Do you have any specific information you can share with the committee to back up the statement that the proposed defense buildup is "affordable"?

ANSWER: The Defense budget will consume a larger proportion of the GNP as a result of the buildup, but that increased proportion will not be high by historical standards. We expect Defense outlays to reach 6.3 percent of GNP in FY 1983 and to rise to 7.2 percent in FY 1987. It is important to note that these percentages are quite reasonable in historical terms. From 1956 to 1964, for example, Defense consumed 8.5 percent of GNP on the average and the annual rate of increase in the CPI averaged 1.6 percent. These data indicate that the planned levels of Defense expenditures are not intrinsically inflationary. Analyses of Defense buildup scenarios by several outstanding econometric forecasters in October 1980 reached essentially the same conclusion. In testimony before the Joint Economic Committee in October of 1981 Charles Schultze addressed both the affordability issue and the inflation issue. His views seem reasonably representative: Defense expenditures are no more a drag on the economy than are any other government expenditures and a buildup is affordable if properly managed. In that regard the extensive efforts by the Department of Defense, with the cooperation of the Congress, to improve contract procedures and management are significant. In addition, the Department works regularly with private sector economists and managers to help them anticipate Defense needs, providing a smoother investment and production process. The planned buildup is affordable; the consequences of inadequate national security are not.

Contracting Out Security and Fire Protection

QUESTION: We have noted the figures presented on page 33 of your prepared statement, Dr. Borsting, indicating substantial conversion to private contracting for goods and services. However, many Members of Congress have expressed concern that too many essential services are being contracted out to a private work force that would not be secure in time of war. How does the Department justify contracting out such activities as security and fire protection?

ANSWER: We have successfully contracted security and firefighting for years. Prior to any decision to seek a commercial source, each activity is reviewed on a case-by-case basis to insure that no risk is imposed to readiness, mobilization, or war plans. If no national defense reasons exist for maintaining one of these activities in-house, we study their costs. Federal employees or contractor personnel must maintain the same performance standards within the same scope of work. Contracting out firefighting or security is justified when the taxpayer can save money without risk to national security and without lowering our standards of performance.

Dollar Savings From Contracting Out

QUESTION: What dollar savings or other efficiencies can you cite in support of expanded contracting of goods and services?

ANSWER: Our studies show a cost avoidance of over $70 million annually will be realized from contracting out decisions made from FY 1979 through FY 1981. Moreover, the streamlining of in-house activities that results from the competitive process has produced an annual cost avoidance of $14 million.

Contracting Out

QUESTION: With all this increased contracting, why can't the Department's civilian workforce be reduced instead of expanded?

ANSWER: The civilian end strength request contained in the FY 1983 budget submission reflects a balanced program of funded workload, DoD civilian personnel to perform that workload, offset by our best estimates of workload which can be performed more efficiently by the private sector as determined by the A-76 cost comparison process. Compared to the FY 1981 actual, the O&M budget request for FY 1983 is 14.6 percent higher in constant dollars. DoD civilian end strength request is 1.6 percent higher than the FY 1981 actual. When all the actual and projected cost effective contracting under the A-76 program for FY 1981, 1982 and 1983 is added, the total effective civilian end strength increases by 5.1 percent over the FY 1981 base.

DoD Employment

QUESTION: To what extent has total employment by the Defense Department increased over the past decade? By total employment, we mean both direct hire and contractor - hired personnel. (Details for the record)

ANSWER: Defense Department civilian employment over the past decade has declined. The following table shows DoD civilian employment in military functions. The table also shows those civilians employed by contractors in A-76 functions.

	Total DoD Civilian Employment (000) 1/	Contractor Personnel in A-76 Functions (000)
FY 1974	1,109	x
FY 1975	1,078	x
FY 1976	1,042	x
FY 1977	1,022	x
FY 1978	1,017	x
FY 1979	991	x
FY 1980	990	x
FY 1981	1,019	x
FY 1982	1,033	x
FY 1983	1,035	151 2/

1/ Includes direct and indirect hire spaces.

2/ Until recently, accurate records were not kept for contractor hired personnel in A-76 functions. From 1973 through 1981 approximately 20,000 DoD spaces were converted to contractor - hired spaces. Through FY 1983, there are approximately 151,000 contractor - hired workyears in the DoD.

Foreign Military Sales

QUESTION: There has been much discussion of late on the planned foreign military sales. In consonance with the acceleration of this program, what efforts are underway to correct the billing inefficiencies of the stock funds as identified by GAO?

ANSWER: We indicated in our response to the GAO report that, based on our review of the GAO workpapers from which their findings and recommendations were developed, it was our opinion that the facts did not support the GAO allegation that Defense was underpricing stock fund sales to FMS. Subsequently, GAO announced a new audit of stock fund pricing which we expect will correct the deficiencies of the previous audit. In our continuing effort to ensure that Defense pricing recoups replacement costs, effective with FY 1982 stock fund sales, our pricing policy has been revised so that FY 1981 actual inflation experienced by each of the Services and Defense Logistics Agency is being used in lieu of the published Defense inflation factors. The rates range from 3% for Marine Corps supply support agreement customers to 26% for Air Force non-supply support agreement customers. We believe that our pricing policy is in accordance with the law and does not subsidize the FMS program.

QUESTION: The GAO contends that FMS transactions have been made on the basis of outdated price lists. As a result, the billing price of the item has been less than replacement cost, thereby forcing the taxpayer to "subsidize" FMS. What management actions are being taken to assure recovery of the total cost of replacement to stock?

ANSWER: We found deficiencies in the GAO audit of secondary item prices similar to those in the stock fund audit. The new GAO audit will cover these prices as well as stock fund items. After we corrected the errors detected in the earlier audit, our data indicated that, on the items reviewed, we had billed 116% of replacement cost. Since there was no evidence of an overall underrecoupment, we have not seen a basis for modifying our pricing policy.

QUESTION: It is argued that each military service adheres to different pricing methodologies for FMS. Has OSD undertaken any actions to implement a uniform pricing policy?

ANSWER: OSD, since the inception of the FMS program, has prescribed uniform pricing policies. Over the years, these pricing policies have been revised and expanded to provide more specific guidance and to reflect changes in the law. In June 1981, the various instructions and policy documents were incorporated into a Foreign Military Sales Financial Management Manual which consolidates all FMS financial policy in one place for ease in use. Also, pricing examples have been included, as well as other clarifying information. In addition, the Services have held pricing seminars to train their personnel and the Defense Institute of Security Assistance Management has recently introduced a new FMS financial management course for Defense personnel which teaches the uniform policy. However, in the implementation of any uniform policy, some differences in detail will always arise. They are acceptable if they remain within the policy guidelines.

QUESTIONS SUBMITTED BY SENATOR STENNIS

Changes in the PPBS

QUESTION: Your statement mentions the changes in the Planning Programming Budgeting System and the Defense Resources Board to effect a more decentralized policy execution. Do you believe these changes will ensure that programs in the future such as the M-1 tank, the Infantry Fighting Vehicle and the AH-64 helicopter will not require almost 20 years of development prior to fielding of the system?

ANSWER: I expect the acquisition reforms and the revised PPBS to lead to an earlier identification of the required systems and to a more efficient and focused prosecution of the resulting development and acquisition effort. At the same time, because new systems will continue to evolve from previous and ongoing development efforts, we are unlikely to see clearly new concepts or designs take birth and move to the field in the span of a decade or less. The history of technological development and change indicates that implementation of inventions or technological breakthroughs is not so rapid a process.

Question: With regard to the need for more realistic cost data, tell me about the reserves that will be established for various programs to support technological uncertainties and contractor's business basis. How will these be established? Will it be a percentage of the baseline program cost or will it vary by weapon system?

Would you say this will be a contingency line item that will be included for each new weapon system in the future? If this is true, then I am not certain that one can call it a form of cost discipline.

Answer: Application of explicit methodologies to evaluate, quantify and plan for risk will determine which programs involve technological risk. Use of Army's Total Risk Assessing Cost Estimate (TRACE) or similar methodologies are envisioned. The relationship of the amount budgeted for uncertainties to quantifiable program funding needs will differ by program.

It is not planned that each new weapon system will be allowed to budget for technical risk pro forma. Only after application of explicit methodology will the need for funds to deal with uncertainties be considered. If such funding is required to provide a reliable program cost to the Congress, it will be included in the budget request. If it falls outside that criterion, it will not.

FY 1982 Program Supplemental

QUESTION: The Department has included in the FY 1982 supplemental request an amount of $333 million for new initiatives. The Congress has generally viewed supplemental requests as a vehicle to accommodate fact-of-life changes and emergency requirements that would severely affect the military services if they were to be considered with the following year's budget request. Do you feel that the new initiatives fall within these categories?

ANSWER: The request for new initiatives may not follow the traditional sense of emergency supplemental requirements, however the $333 million includes timely items for 1982 investment which will impact on our future defense capabilities.

QUESTION: In recent years, the supplemental requests have not been enacted till the last quarter of the fiscal year. Just what would the impact be if these new initiatives were to be deferred for consideration with the Fiscal Year 1983 budget?

ANSWER: The new initiatives can be accomplished in 1982, even if enacted in the last quarter. They are FY 1982 advance investments for our FY 1983 budget and beyond, and to defer their consideration to the FY 1983 budget further delays our opportunity to realize their benefit in our defense capabilities. The more we defer their consideration, the more we defer their availablity.

QUESTION: You mentioned that the supplemental request to support the military and civilian pay increases which were approved last October 1st will be forwarded in early spring. Why is this? There is more than $4 billion involved for the Department of Defense. Isn't this normally submitted in January with the budget year request?

ANSWER: The pay raise supplementals have been traditionally submitted in January with the budget year request. The decision to postpone the transmittal of pay supplementals this year was made by the Office of Management and Budget, and was made primarily to permit sufficient time for the kind of review --government-wide --- that is necessary to assure the most effective and economical use of available resources to meet the cost of the pay raise.

QUESTION: Don't you agree that the delay in submission of the pay supplemental can only serve to delay enactment of the Fiscal Year 1982 supplemental?

ANSWER: The pay supplemental request will be submitted in early spring - very shortly. Since in recent years, the supplemental requests have not been enacted until the last quarter of the fiscal year, the delayed submission of the pay supplemental should not serve to delay enactment of the FY 1982 supplemental.

Procurement of C-5 Aircraft

Question: The Fiscal Year 1982 Defense Appropriations Act included $50 million for procurement of unspecified wide-body aircraft. I understand the Department is considering use of these funds to initiate procurement of the C-5 aircraft to enhance airlift capability. Is it your plan to await approval of the funds contained in the supplemental request for the C-5 aircraft prior to indicating work to reactivate the production line?

Answer: The FY 1983 budget, as submitted, reflects a reprograming of $97.7 million in FY 1982 which reprograms the $50.0 million provided by the Congress for the procurement of unspecified wide-body aircraft and $47.7 million from the FY 1982 Civil Reserve Airlift Fleet (CRAF) modification program to the C-5B advance procurement line item. This reprograming action will be submitted to the Congress in the near future. Upon Congressional approval it is the Department's intention to utilize these funds to restart the C-5 production line prior to approval of the supplemental.

"M-1 Surge"

Question: There is $126 million contained in the fiscal year 1982 supplemental to "bank" additional turbine engines and fire control systems for the M-1 tank in the event it is desirable to "surge" production of the tank. Are we certain that additional procurement of these components is desirable at this point? Testing continues on the tank, and they are only now being fielded for the first time to operational units in Europe.

Answer: Yes, additional procurement of these components is desirable. The fact that the MI tank is only now being fielded to our units in Europe is precisely the reason we need the capability to surge production in an emergency. Although durability testing of the engine continues, it is not anticipated that this will result in the redesign of banked components. It should be noted that the requested funds will be used to procure engine and fire control components, not assembled engines and fire control systems.

Multiyear Contracting

Question: The budget proposes to expand multiyear contracting to 14 systems from the three systems approved in fiscal year 1982. The General Accounting Office believes that DoD may not achieve its savings goals in those instances where competition is not expanded. They believe it will be three to four years before a meaningful assessment can be made of the value of multiyear contracting. Wouldn't it be wise to maintain a relatively modest effort for this innovation until an effective assessment can be made.

Answer: For several reasons, I do not believe that we need to delay the introduction of multiyear procurement. Multiyear procurement as proposed by the Department is not as much of an innovation as GAO and others would have you believe. By selecting multiyear candidates that are mature in design, cost and requirement, we have reduced the risk of cancellation or of problems to very small degree compared to the risk that existed for the multiyear procurements of the late 1960s and early 1970s. At the same time, we are not creating large contract cancellation charges as we did ten years ago. We are funding these multiyear contracts up front as we proceed. That is an important distinction. By putting this funding up front, we are retaining the flexibility to make adjustments in these multiyear contracts without having to generate consequential appropriation requests. I am certainly not suggesting that changes be made to these multiyear programs once a contract has been signed. However, there is a flexibility of action inherent in up front funding which was not available for multiyear contracts in the past. That flexibility should limit the risk which someone might otherwise attribute to "innovative" ideas.

Second, the savings in these multiyear contracts will be generated from a number of sources. One such source is expanded competition at the subvendor level. However, other savings will come from economic lot procurement which yield savings from the reduction in set up time, improved quality control associated with continuing and constant production lines, procurement of material at advantageous prices as a result of large lot procurements and more efficient production techniques associated with large lot procurements. By not embarking on these multiyear plans, we will not take advantage of these savings and instead will condemn ourselves to annual lot procurements which can only cost us more.

Depot Maintenance Backlog

Question: The fiscal year 1983 budget proposes to eliminate the backlog of depot maintenance. On the surface this appears commendable. However, we have been told in the past that a small amount of backlog was desirable as a management tool to preclude the peaks and valleys in scheduling. Would you comment on this?

-- Can you tell us the Depot Maintenance funding which was obligated in fiscal year 1981 and the estimates for fiscal year 1982 and 1983?

Answer: There are two kinds of backlogs - funded and unfunded. A funded backlog is that work which is financed by appropriated funds but which is in excess of the exact capacity of depot activities to accomplish. A minimal backlog of this nature is necessary in order to assure a smooth flow of work into the depots.

An unfunded backlog is work which is required to be accomplished but for which funding is not provided. While the FY 83 budget provides for the elimination of unfunded backlogs (requirements) in appropriated funds, funded backlogs to assure an orderly scheduling of workload into the depots continue to exist.

Depot Maintenance funding for FY 1981 was $7.6 billion. For FY 1982 and FY 1983 it is estimated to $8.5 million and $10.4 million, respectively. These amounts are shown below by Service.

($ in Billions)

	FY 1983	FY 1982	FY 1983
Army	.9	1.1	1.2
Navy	4.5	5.0	6.0
Marine Corps	.1	.1	.1
Air Force	2.1	2.3	3.1
Total	7.6	8.5	10.4

Increased Depot Maintenance Programs

Question: The Military Services have had trouble in recent years completing ship overhauls and other depot rework programs in a timely manner. For example, the Navy failed to accomplish the number of airframes and engines programed for rework in fiscal year 1981. Do you have faith that the increased funding that the President has requested for depot maintenance can be effectively utilized?

Answer: Yes. The increase requested in the Depot Maintenance program is essential if we are to eliminate the backlog of depot maintenance requirements and support the operations of our forces. Of the $1.9 billion increase requested in FY 1983, $.350 billion is required due to the removal of the Air Force's contractual depot maintenance efforts from the Air Force Industrial Fund and approximately 40%, or $.5 billion, is associated with increased cost. Of the real growth requested in FY 1983, approximately one-third is projected to be accomplished in the private sector. The FY 1983 budget provides for an increase of 7,900 civilian personnel at our DoD depot maintenance activities to assure accomplishment of the remaining increase in workload which is programed to be accomplished at DoD activities.

Navy Real Property Maintenance

Question: Apparently, the Navy spends considerably less in maintaining real property activities than the other Services. Why is this?

Answer: The Navy request represents a balanced program developed between competing requirements for readiness sustainability, modernization and force structure. A balanced program allows the various competing requirements to operate at a level necessary to support the Navy's goals and objectives. The backlog of maintenance and repair is increasing only slightly in FY 1983. This is a reflection of a rapidly expanding Navy in a resource constrained environment. However, we feel the funds allocated to the maintenance of real property (MRP) are adequate. The reason Navy resources allocated to MRP are less than the other Services is most likely due to fewer real property facilities.

Morale, Welfare and Recreations

Question: The Navy, in terms of active duty per capita, receives less than half the level of appropriated fund support for recreation than the other Services. In fact, the support for the Army and Air Force is increasing while the Navy is relatively steady. Why is this?

Answer: The Army and Air Force personnel are deployed to overseas bases with appropriated fund supported facilities. Equivalent Navy personnel are aboard ship where appropriated fund support is relatively minor. The Navy CNO has expressed a strong interest in improving quality of life programs including recreation programs. The Navy is currently conducting an extensive review of the Morale, Welfare and Recreation (MWR) program to determine if additional appropriated funding is necessary and, if so, to what level.

Morale, Welfare and Recreation Activities

Question: Is there a philosophical difference between various Services relative to the level of recreation support required?

Answer: DoD Directive 1330.2 provides the same appropriated fund authorizations for all of the Military Departments. There is, however, a practical difference between the way the Services have chosen to fund its recreational support functions.

Increased Training for Tactical Pilots

Question: Flying hours for Air Force pilots are being increased from 17 hours per month in FY 1982 to 18 1/2 hours in FY 1983. Flying hours had gone as low as 13 hours in FY 1978.

What is the cost of the increased flying hours in fiscal year 1983? What has been the highest rate of flying hours per month for Air Force pilots that has been achieved in recent years?

Answer: The operating cost for the increased hours per pilot in the tactical force in FY 1983 will be $156 million.

The highest utilization rate achieved by these pilots occurred in FY 1981, with a rate of about 16 hours per month.

SUBCOMMITTEE RECESS

Senator **Rudman**. The subcommittee will stand in recess until Thursday, March 11, at 10 a.m., when we will receive testimony on the fiscal year 1983 Navy budget overview.

[Whereupon, at 10:40 a.m., Tuesday, March 9, the subcommittee was recessed to reconvene at 9 a.m., Tuesday, March 16.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1983

TUESDAY, MARCH 16, 1982

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:05 a.m., in room 2228, Everett McKinley Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, McClure, Schmitt, Andrews, Kasten, Rudman, and Specter.

DEPARTMENT OF DEFENSE

RESEARCH, DEVELOPMENT, AND ACQUISITION

STATEMENT OF HON. RICHARD D. DELAUER, UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

ACCOMPANIED BY:

- BRIG. GEN. ROBERT MOLINELLI, DEPUTY UNDER SECRETARY OF DEFENSE FOR TACTICAL WARFARE
- T. K. JONES, DEPUTY UNDER SECRETARY OF DEFENSE FOR STRATEGIC AND THEATER NUCLEAR FORCES

RESEARCH AND DEVELOPMENT BUDGET OVERVIEW

Senator STEVENS. The committee will come to order.

This is the time scheduled to conduct an overview of the research and development budget of the Defense Department for fiscal year 1983. The total requested for research, development, test, and evaluation is $24.3 billion, an increase of $4.4 billion over appropriations to date for fiscal year 1982. There is also pending a program supplemental appropriation request of $57 million for fiscal year 1982. The budget request estimates 1983 outlays of $22.2 billion, an increase of $3.9 billion over the budgeted outlays for the current year.

COMPARATIVE TABLE

For the record the committee will ask the Department to develop a comparative table for 1982 and 1983 appropriations for the R. & D. accounts, by account, displaying both budget authority and outlays. The supplemental should be displayed separately for fiscal year 1982. The differences between 1982 and 1983 funding levels should be displayed by percentages as well as dollars.

[The information follows:]

R.D.T. & E. PROGRAM COMPARISON

[Dollar amounts in millions]

	Fiscal year 1982 TOA	Fiscal year 1983 TOA	TOA increase	Percent increase	Percent real growth
R.D.T. & E., Army	$3,610	$4,484	$+874	+24	+17
R.D.T. & E., Navy	5,807	6,232	+425	+7	+1
R.D.T. & E., Air Force	[1] 8,876	11,221	+2,345	+26	+19
R.D.T. & E., Def. Ag./D.T. & E.	1,751	2,320	+569	+32	+25
Total	20,044	24,257	+4,213	+21	+14

[1] Includes $57 million fiscal year 1982 supplemental request.

[Dollar amounts in millions]

	Fiscal year 1982 outlays	Fiscal year 1983 outlays	Outlay increase	Percent increase	Percent real growth
R.D.T. & E., Army	$3,366	$4,039	+673	20	+13
R.D.T. & E., Navy	5,412	5,947	+535	+10	+3
R.D.T. & E., Air Force	7,969	10,197	+2,228	+28	+20
R.D.T. & E., Def. Ag./D.T. & E.	1,552	2,017	+465	+30	+22
Total	18,299	22,200	+3,901	+21	+14

INTRODUCTION OF WITNESS

Senator **STEVENS**. We are happy to welcome the Under Secretary, Dr. DeLauer, before the committee. We would be happy if you would introduce those with you this morning, Mr. Secretary, and highlight your prepared statement. The summary version of your prepared statement will be printed in full in the record together with tables in appendix A from your comprehensive congressional statement on research, development, and acquisition.

This is an unclassified hearing and we don't anticipate that it will go to a classified basis today.

Good morning, Doctor.

INTRODUCTION OF ASSOCIATES

Dr. **DELAUER**. Good morning, Mr. Chairman.

As you just mentioned, we have submitted for the record both an unclassified statement that I have made to Congress on R. & D. and acquisition, and a classified version. This morning I would just like to take a minute or two to highlight this.

I have brought along T. K. Jones, who is the Deputy Under Secretary for Strategic and theater nuclear forces and General Molinelli, who is our Deputy Under Secretary for Tactical Systems.

Before I start, since this is my first chance before you this year, I want to thank you personally as well as the committee for the effort on last year's appropriations. It gets us off to a good start. If we can continue the programs that we submitted last year I think we are well on the way to redressing the imbalance between United States and Soviet forces that now exists.

Senator SCHMITT. It would be helpful, Mr. Secretary, if you would start to take care of all of the programs that were appropriated.

REQUEST FOR DEFERRAL OR RESCISSION

Dr. DELAUER. As you know, Senator, some of our problems are that we have a mismatch between appropriations and authorization.

Senator SCHMITT. No, not in a legal sense, Mr. Secretary, and I hope that you all will start to recognize that.

Dr. DELAUER. Yes, sir. I would submit to you, sir, that Secretary Weinberger is well aware of the problem. He has discussed it with the Chairman and we are in the process of trying to resolve that issue at the present time.

Senator STEVENS. If we have to go back and wait for an authorization on that, it is going to count against this year's authorization levels. Even though it was no-year money, it becomes 1983 money, Doctor, and it is going to be a problem for us. We reported out our bill and it passed in the Senate before there was an authorization bill. Under the rules of the Senate that was not subject to a point of order. It was authorized and it has the full force and effect of law.

So I really don't understand why there isn't either a request for a deferral or rescission or a commitment to us that you are going to spend the money that we worked so hard to acquire for you last year.

Dr. DELAUER. I can't very well respond to anything other than what we have, sir. We are trying to resolve this in a way so that we can get on with the job. We certainly don't want to have a rescission particularly on the monies that are at issue because they are very, very necessary.

I will take your message back.

Senator STEVENS. Thank you.

BUDGET REQUEST

Dr. DELAUER. Let me get on with my summary statement, Mr. Chairman. You already mentioned the overall budget request. We are requesting from the Congress this year approval of $24.4 billion in R.D.T. & E. and $89.6 billion in procurement. This is an increase in our R.D.T. & E. budget, and it has increased in real terms by $4.4 billion. But as far as a percentage of the total DOD budget, it still remains the same, about 9.4 percent.

Our procurement budget, on the other hand, has increased by $24.2 billion. While last year's program was 30.5 percent of the budget, this year it increases to 34.7 percent of the DOD budget. Now this certainly reflects our emphasis on trying to have a force modernization and at the same time make attempts to institute economic procurement initiatives.

THREAT OF SOVIET MILITARY STRENGTH

I would like to spend just a brief moment and discuss some of the important parts of the program. I am not going to dwell on the threat. This committee, as well as others in Congress, has had opportunities to have the threat presented to them. All I will say is that the threat of the Soviet Union is large in size, it is increasing, and it is not a second-rate force. It is sophisticated and very, very capable and they are out-producing us two to one.

Senator **Schmitt**. Mr. Secretary, if the Chairman would yield, I believe that we have a pending request for a much more comprehensive declassified discussion of the threat, and the opinion of this subcommittee, if I interpret it correctly, is that it is absolutely essential if we are going to be able to publicly justify some of the budget requests this year and in future years.

The threat is absolutely unbelievable, in my opinion. I think there is a military industrial complex in the Soviet Union that they can't turn off and we have got to figure out a way to make sure the American people recognize it so not only are we able to counter that threat, but also develop policies which will encourage the Soviet Union to divert resources from this military industrial complex that they have created and can't turn off into other more humanistically oriented activities.

What is the status of that?

Dr. **DeLauer**. The status at the present time is that we are reviewing the details of the classified aspects of the threat presentation and those of course are being given. We are trying to declassify it in a way that is a bit more meaningful than the one that was presented last year when the Secretary put out that booklet that had, at that time, the status of the threat.

There is some additional information that has come since then and, while I can't cover it today in open session there are things that we are trying to make available on an unclassified basis.

But, as you know, Senator Schmitt, many of the indications of their capability are obtained from intelligence sources such that just the fact of revealing the information reveals the intelligence sources. These sources are part of the problem.

Senator **Schmitt**. Well, but we have to come to grips with this, Mr. Secretary. I think everyone on this committee feels that we have to. I am, I hope, one of the strongest protectors of intelligence sources and means, but, on the other hand, we can sit here and talk all day to ourselves about how serious the threat is but if we can't convince anybody else who doesn't have access to data we might as well forget it.

Dr. **DeLauer**. Your point is well taken.

Senator **Schmitt**. Excuse me for interrupting.

SOVIET INVESTMENT STRATEGY

Dr. **DeLauer**. To give you a feel for exactly what their capability is, in regard to their investment strategy, in the past 10 years they have out-invested the United States by almost $440 billion. Their R. & D. budget has been growing at about 7 percent in real growth, which far exceeds our real growth. They have been modernizing their force on a continuous basis and we have not. Our last year's budget and this year's budget gets on with this whole question of force modernization.

It's important to remember, our No. 1 aim in this force modernization, particularly in the strategic area, is to create a credible deterrent. Our program is a program that, if pursued over a period of a decade in the strategic area, will indeed provide the United States with a survivable and enduring deterrent posture and deterrent force structure. That is why this program that we initiated last year has to continue.

STRATEGIC PROGRAM

Let me cover briefly the strategic program. It is 27.4 percent of the R.D.T. & E. budget, $6.6 billion. It is 15.3 percent of the DOD procurement budget, which turns out to be $13.7 billion. If it is carried out, as I stated, it will provide a survivable and enduring force. It will reverse the trend that has been building in the last decade. It will not eliminate but will reduce the margin of inferiority. It will reduce it to such a point that the credibility of the deterrent force will be very high and it will, in turn, reduce the instability of the current strategic relationship and the Soviets incentive for surprise attack. In turn, it will provide the United States the initiative in directing the investment strategy of the Soviet Union.

As you know, the program is very coherent. It provides for increased command, control and communications, and increased land-based capability. It provides us, at the end of the decade, with a very accurate, highly effective submarine-based missile system. it provides for two strategic bombers to replace the aging B-52 force. It provides significant investment in upgrading the continental defenses of the United States.

These things in toto present a situation to the Soviets such that they will have to make some major investments in their defensive posture. They will no longer be permitted to select exactly where their investment strategy will be, but they must react to what we intend to do.

This, I think, is a very stabilizing approach and it is conceived on the premise that, with the present economic situation in the Soviet Union, perhaps a more meaningful discussion in regard to reduction of arms can take place.

This is the steam engine for the whole initiative of arms reduction. Without this strategic program there is no incentive whatsoever for the Soviet Union to sit down and talk about arms reduction.

CONVENTIONAL THEATER FORCES

Now let's talk about our conventional theater forces. The R.D.T. & E. budget requested is 31.2 percent of the DOD budget, $7.6 billion. The procurement budget is the highest, 66.8 percent, and it represents almost $40 billion of procurement money. These programs are in addition to the investment in the strategic forces.

Last year my emphasis was to put together a coherent strategic package of which the Congress was very supportive of in the appropriations area and in authorization. I think we are well on the way. We have to keep that momentum going and this year's program is necessary to do that.

However, in the next year my particular management attention is going to be on the conventional forces. I do not think we have as coherent a program in our conventional forces. There are a lot of conventional programs that appear to overlap or attempt to do the same mission. I think we have to do a better job on the tactical battlefield situation, a more interactive program. I think that the fleet defense needs a more coherent program in the utilization of assets other than those organic to the fleet. I think that the Army has to start looking at the second echelon, the deep interdiction problem facing them, in order to blunt the superior numbers of the adversary.

We are asking the Congress for quite a few resources. We are augmenting the airlift which is very, very deficient. In this next year we now have to integrate that with the sealift and with the prepositioning aspects of deployment.

TECHNOLOGY BASE

Now for the technology base, we have increased it slightly to 13.8 percent of the R.D.T. & E. budget, $3.3 billion. It is the technology base that really is critical to the future. We have some very, very important technologies for the future and we have to move them out of the exploratory development phase of research and development and into subsystem development.

A notable example is our very high-speed integrated circuit work which is now reaching a point where we can do some moving into the subsystem area on a selected basis. Then in the future we will try to use close to one micron lithography as a basis for new signal processing equipment.

We have attempted to better order our technology base as to the high leverage items. Last summer the Defense Science Board established a task force under the direction of Dr. George H. Heilmeier, a former ARPA Director, and he did a beautiful job. This report is out and I urge those who are interested to read it. It provides on a selective basis for things that are high leverage on a sliding scale that says here is where we should make our emphasis. It is a very good report.

We are also concerned that over the last few years our relationship with our national universities and colleges has not progressed as fast as we would hope. We are running into a shortage of technical people not only for the industrial base but also for the armed services and the Department of Defense civilian cadre. We are trying to build up a capability in the universities not only to do good research, but also to provide us a source of future technical people that we need so desperately.

I am taking on an initiative to see that a part of the independent research and development funds that are being spent by our suppliers are directed toward some university research. It is a way to get better talent on this subject as well as provide universities a source of funds with which they can meet their institutional requirements. I am working with the White House, with Jay Keyworth, on ways to improve our relations with the unversities.

As you know, there is a problem with how technology is transferred. At the present time, in the centers of excellence of this country, almost half of the Ph. D. students at our better universities are foreign students. So we have to work that problem out with the universities. I think we are making progress but we have a lot to do.

Another DSB study that was just finished, chaired by Dr. Ivan Bennett from New York, has in a very detailed way outlined things that we ought to do to permit us to achieve better responsiveness out of the universities. I again recommend that this report be reviewed.

ACQUISITION

Today, at your request, we are focusing on the research and development, but just a word on acquisition. As you know, we are in the second year now of our acquisition reforms, sometimes referred to as the Carlucci Initiatives. These include better longer range planning and the integrating of the budgeting system with the acquisition system. We have canceled 83 programs which will save $1.6 billion in fiscal 1983 and certainly many more billions over the 5-year period that is covered by the development plans.

We have begun economical multiyear procurement. We have three programs in 1982 which will save over $300 million. We have added 13 more programs in 1983 which will save over $800 million. Together that is well over $1 billion saving in the 1 year since we started that program.

We have added to the budget in 1983, $2.8 billion in order to bring 18 systems up to economical production rates. If this had been carried on in the last decade the full F-15 buy would have been behind us. We would have had all the F-15's that the Air Force needed and we would have had them at much lower cost and had them in service at a much faster rate. We hope that these economical buys will save us $2.3 billion over the 5-year period.

We have increased emphasis on competition. We are developing second sources on most of our tactical weapons systems, those with large quantity production runs, and we are placing a greater emphasis on rebuilding the industrial base. We have done this both by supporting the President's program for increased competition but we have also in our seminars and meetings urged on the primes in our industrial base to develop a better structure of subcontracting. We have evidence that for every $1 a prime invests in a competitive source at the subcontracting level he will get back $20 over the run of the normal program.

We are requesting $2 billion for industrial preparedness over the 5-year period. We need to create an environment conducive to capital investment and productive growth and we are trying to do this.

In conclusion, I have to urge that this committee avoid simplistic approaches to budget cuts. Our program is coherent, is well structured, and it is designed to achieve the goals of both modernization and readiness. We can't ignore the threat. We need your help and support again this year.

Now I and my colleagues are ready to answer any of your questions, Mr. Chairman.

[The prepared statement of Under Secretary of Defense DeLauer and a statement by the Director of the Defense Advanced Research Project Agency [DARPA] follow:]

PREPARED STATEMENT OF HON. RICHARD D. DELAUER

UNDER SECRETARY OF DEFENSE
FOR
RESEARCH AND ENGINEERING

EXECUTIVE SUMMARY
TO
THE FY 1983
DEPARTMENT OF DEFENSE
PROGRAM FOR RESEARCH, DEVELOPMENT AND ACQUISITION

Mr. Chairman, Members of the Committee:

It is a pleasure to be here today to present to you our FY 1983 Research Development and Acquisition Budget request.

With your permission, Mr. Chairman, I will submit the entire posture statement for the record and summarize for you the parts of the statement I consider most important.

Before I begin, however, I'd like to take a moment to thank you and the Committee for the cooperation and support exhibited for our programs during the past year. This year, FY 1983, we have put together a program that I am proud to say contains a coherent strategy for building on the work we started last year. The FY 1983 RD&A budget request of $114 billion is the means by which we propose to continue key programs that are urgently needed in the near term for our deployed forces. It is the means by which we propose to invest in our long-term military strength by initiating new programs and maintaining the vitality of our technology base. It is the means by which we propose to make changes in the acquisition process, from planning through production, and to procure in sufficient quantities affordable weapons and support systems.

We have developed this program by evaluation and long-range planning of defense major mission areas. The program was developed both to correct near-term needs. The total program for each mission area is developed in an integrated comprehensive way, including Command, Control, Communications, and Intelligence systems.

I wish to take this opportunity to discuss with this Committee my philosophy toward research, development, and acquisition; my assessment of the critical problems we face; and the goals, priorities, and key thrusts I propose to address these problems. I'll start my overview with a brief description of my major responsibilities as the USDRE, my basic approach to carrying out those responsibilities, and the steps we have initiated and are planning to take to achieve our goals. Then I'll conclude with the primary emphasis in each major mission area. Chapters II through XI of my statement amplify each of these themes and initiatives in greater detail. Today I will present the broad horizons of our program to you. Either I, or my deputies, will return as the Committee deems appropriate to further explain the details of our program.

My posture statement explains in detail how I have reorganized the office of the USDRE to meet our program needs. I won't dwell on these changes except to explain to you my approach to management.

I am like a senior executive of a large corporation. The President and Secretary of Defense are my bosses. You are my board of directors. I have a large staff which I intend to lead in a coordinated manner. That is my principal task, to pull together a broad range of diverse programs into a coherent program that gives this nation the most defense for each tax dollar. I have proposed several organizational changes within my office with the aim of exercising my major responsibilities more effectively. The proposed establishment of two Assistant Secretaries of Defense (ASD) reporting directly to me--one for Development and Support, and one for Research and Technology--will create a three man USDRE top management team, led by me, to set the standards and pace, and to move toward the objectives set by the Secretary of Defense in the critical areas of modernization, readiness, acquisition management, and the technology base.

The proposed Assistant Secretary of Defense for Development and Support would be responsible to me for the management of our modernization plans and programs, including mission area assessments, and for emphasizing readiness early in the R&D process including reliability, maintainability, sustainability and logistical support goals. He would assist me in developing guidance on investment objectives to the Secretaries of the Military Departments, and in providing all of the participants in the acquisition process with analyses of the investment balance and of the effectiveness of proposed investment programs in meeting broad mission needs. This proposed ASD for Development and Support would also serve as the Principal Deputy Under Secretary of Defense for Research and Engineering. The proposed ASD for Research and Technology would assist me in managing our technology base--planning a comprehensive science and technology program, directing basic research, interfacing with the nation's scientific and technical community, and improving the transition of technology into our deployed systems. A key responsibility would be to assist the Services in developing advanced technology system options, and to use technology innovatively to increase total military force capability. He would also serve as the Director, Defense Advanced Research Projects Agency.

My office reorganization also places increased emphasis on integrating Command, Control, Communications and Intelligence (C^3I) capabilities into each major mission area. Each Deputy Under Secretary for a major mission area is now responsible for total system acquisition, including associated C^3I and other support requirements, in his assigned mission area. I have assigned C^3I specialists to each mission Deputy to support that expanded role. However, overall C^3I coordination will be achieved by the Deputy Under Secretary C^3I who has "cross-cutting" authority to integrate C^3I matters across all mission areas. Similar cross-cutting authorities have been assigned to the Deputy Under Secretaries for Acquisition Management, Research and Advanced Technology and International Programs and Technology; and to the Director, Defense Test and Evaluation.

As you know, Mr. Chairman, when Secretary Weinberger assumed office he asked Frank Carlucci, his deputy, to look at the way we acquired our new systems with the idea of making needed changes. Frank did a fine job of pulling together a series of improvements that experts, myself included, have been saying for years were needed. Those changes became known as the DoD Acquisition Improvement Program or the "Carlucci Initiatives." We have made significant progress in implementing these changes. My statement explains the changes in more detail so I'd like to take a moment to outline the impact of some of those changes.

We've significantly improved our long range planning. We have integrated our acquisition management process, sometimes known as the DSARC process, with our planning, programming, and budgeting system. This has helped us avoid starting or continuing systems we can't afford or don't need. During our review process we cancelled 60 programs resulting in approximately $1.1 billion savings in FY 1983. The department is continuing to audit program cancellations and this figure is expected to grow.

With your cooperation, and I might add, excellent support, we were able to start 3 multiyear procurement programs, the F-16, the TRC-170 radio, and the C-2 aircraft. These programs will save well over 300 million dollars as a result of our combined efforts. A fourth FY 1982 multiyear program is pending approval that will raise these savings to over $400 million. Our FY 1983 request to you contains 13 multiyear requests. If these are approved we will save well over $800 million. Thus in the space of one year we will have saved well over a billion dollars. I believe that is a significant achievement.

Another significant improvement we made was to restructure a number of production programs so that the production lines could operate at more efficient rates. During the FY 1983 program and budget preparation, we made decisions to increase production on 18 major programs. These decisions will save us almost $2.3 billion through FY 1987. To achieve these savings we must increase FY 1983 funding by about $2.8 billion. This is another significant step in the right direction.

Still another initiative which I believe warrants your support is our renewed emphasis on competition for defense contracts. It has always been firm DoD policy to purchase required materials and services, including major weapons systems on a competitive basis whenever this makes good sense. What we in this administration have done is to emphasize that it makes sense more often than previous administrations have done. Achieving cost effective competition is recognized as a major challenge and is one of our acquisition improvement initiatives. I should note, however, that the record for competition is not as bad as some people sometimes try to make it out to be. Out of a total of 48 systems, we find that 42 had initial competition in the program where the contractor was picked through a competitive source selection process. In 24 of the SAR systems we actually contracted with two or more competitors for some or all aspects of the development program. In some of these systems like the F-16, A-10, AAH, and M1, we have built competitive hardware for evaluation before entering full scale development. In others, such as the Multiple Launch Rocket System, DIVAD Gun, and Cruise Missile, we carried the competition through the entire development program. Even when we eventually get to a single prime contractor, significant competition still takes place at the subsystem and vendor levels for the majority of the effort. In fact our studies show that even on sole source follow-on production contracts approximately half of each dollar ends up being spent competitively down at the subsystem or vendor level. On the TRIDENT I missile system, for example, $1.4 billion of the $3.2 billion production cost of the missile was subject to competition at the subsystem level.

For the future, we are considering several systems as candidates for production competition at the prime and subcontractor level and plan to look at more in the near future. In many cases we breakout production subsystems for direct purchase by the government. For instance, the Tomahawk cruise missile has, or will have competition for virtually every major subsystem. We now examine the acquisition strategies of all major programs for the benefits of competition in production as well as spare parts. We firmly believe competition provides cost benefits in most cases. We have intensified our scrutiny of the broader economies from competition in production phase and plan to continue this emphasis in the future. Before leaving our acquisition initiatives it is important to mention that we have initiated important new initiatives bearing on the responsiveness of the industrial base. The Secretary has summarized these actions in his Statement of February 2nd, and I would emphasize how critical our capabilities in this area are to improving our near term and longer term deterrent posture.

In FY 1982 through FY 1987 we hope to increase funding of industrial preparedness programs by more than $2 billion over what was planned by the previous administration. Our goal is to reduce manufacturing lead time and to demonstrate preparedness for a conflict of indefinite duration. This requires isolation of production bottlenecks, improving the decision making process, and developing selected surge initiatives for mobilization planning. My statement goes into further detail on the other initiatives so I won't dwell further. I would like to close this section, however, by emphasizing that I will continue to press vigorously for action on these initiatives because I believe improving our acquisition process and rebuilding the industrial base of the nation are the foundation of our programs. Without this foundation the rest of our program cannot move forward efficiently. Now I would like to shift the direction of my comments a bit. I've been talking about how we do our job, I would like to shift to why that job is essential.

Mr. Chairman, it is not my nature to quote alarming statistics to this Committee on the threat we face. You see the same briefings I do and you know that the threat is real. The situation is not new; it results from over a decade of growing military investment imbalances favoring the Soviets. The quantitative and qualitative trends also continue to be unfavorable, and our projections of broad RD&A indicators show that the future balance will worsen without a significant increase in U.S. military investment patterns. This is a great concern to me. I believe the members of this committee are concerned, and anyone who reads my assessment of the Acquisition and Technology balance in Chapter II will be concerned. To summarize briefly, we are seeing the products of a steady and persistent Soviet force modernization program that combines the historic Soviet emphasis on producing large quantities of military equipment with their more recent successful efforts to field more sophisticated and capable systems. Mr. Chairman, I'm frankly impressed with what they've done. Our past technology lead can no longer offset the quantity deficiency by itself--the numerical disadvantage in most categories of weapons is too great, and our advantage in most deployed technologies is too small. This is the reason for our emphasis in the FY 1983 RD&A budget and programs on deploying increased quantities of operationally effective systems as rapidly as possible, and on increasing our ability to infuse our emerging technology into deployed systems more rapidly.

The situation developing in the field can be seen by a comparison of military equipment being produced and deployed. The Soviets have maintained a military production advantage of well over two to one in most classes of weapons, and that while NATO's production alleviates the imbalance, the Warsaw Pact still enjoys a significant superiority.

The situation appears even worse in the longer term. 1981 marks the fifth consecutive year in which estimated Soviet military investments were approximately double our own. During the past 10 years, the cumulative Soviet advantage in aggregated military investments has grown to about $440 billion. The results of that enormous asymmetry will most likely appear in the form of even greatet quantitative and qualitative imbalances that may have serious implications for our own security and that of our allies. I would also call the committee's attention to the fact that the estimated dollar costs of Soviet military Research, Development, Test and Evaluation (RDT&E), which has been increasing at about 7% per year since 1970 in real terms, has also been growing relative to total Soviet military investments during the past six years. We expect this relative growth to continue, indicating the importance the Soviets place on closing technology gaps.

The Soviets are also continuing their broad, intensive, and well funded program to acquire the West's advanced technologies through espionage and by exploiting inadequately controlled transfers abroad. Soviet leaders since Lenin have viewed technological transfer as an important element in developing their military/industrial base, and, quite frankly, our fragmentary and uncoordinated program of controls has seldom denied them success. I have placed high priority on reducing the loss of critical technologies to the Soviet Union. Our efforts are described in more detail in Chapter V of my statement. We must compensate for the Soviet advantages by making our relative strengths pay off in the field. We have not been successful enough in the past. We must do better, and do better quickly.

As I mentioned earlier, I believe one of the best ways to improve our response to this increasing threat is through better integration of our efforts. In evaluating each mission area we have looked across Service lines to determine ways in which the Services can work jointly to more efficiently meet the mission area requirements. Examples of this are: Air Force contributions to fleet air defense, use of land-based B-52s in sea control; and Army contributions to the interdiction and air-base attack missions. We will continue to explore ways in which the Services can jointly meet mission requirements more efficiently.

This past fall, the President presented to Congress a comprehensive and coherent plan for modernizing our strategic forces. That plan was properly debated at length in the Congress and approved essentially as proposed. This year we need your support to keep that plan on schedule. Enhancing the capability, survivability and responsiveness of our Intercontinental Ballistic Missile (ICBM) force, and the sea-based and air-based elements of the TRIAD is critical to the maintenance of an adequate deterrent posture. The demands on our strategic forces have been increased by the Soviet deployment of many new strategic systems. This requires us to improve deterrent capabilities, including the high priority issues involving Command, Control, Communications and Intelligence (C^3I), so that these systems can endure beyond the initial exchanges of a nuclear war. The requirements for an enduring force--that can survive an attack and be effectively employed through all phases of a conflict--are essential for a credible deterrence. These requirements are greater and more demanding than those for just an initial exchange. Our FY 1983 strategic force modernization program addresses these requirements. We have developed the strategic package as a total program, including significantly improving the integration and management of the strategic C^3I systems. It should be evaluated in that context.

Our Theater Nuclear Force (TNF) modernization program places primary emphasis on implementing NATO's long-range program of deploying Ground Launched Cruise Missiles (GLCM's) and Pershing II to deter Soviet use of theater nuclear weapons. The major emphasis in the TNF program is to improve the survivability and responsiveness of U.S. TNF systems. In all of these areas we would welcome a verifiable arms reduction treaty that would result in lower levels of defense spending while maintaining U.S. security.

In the area of tactical programs, I plan to make a major effort at improving the integration of forces on the tactical battlefield. Bringing the same order and inter-dependence to these programs as we have done to our strategic programs is a major objective for me in the coming year. I have spoken to members of this committee in private meetings where I outlined my plans to review our tactical programs with the general objective of increasing the cross service integration of weapon systems to lower costs and avoid costly stand alone solutions to tactical problems. I welcome your involvement in this process since my office and the Congress are places where the overall cross service posture can be seen clearly. Our RD&A priorities in the tactical mission areas are focused on three primary objectives: to deploy adequate numbers of a mix of weapons capable of sustaining successful operations in a highly mobile combat environment; to increase our ability to deploy forces rapidly in response to hostile military actions which jeopardize our interests anywhere in the world; and to improve our coalition war fighting and regional defense capabilities by increasing the interoperability and complementarity of U.S. forces with those of our allies and friends. A primary emphasis will be to reduce cost growth of major systems.

As I mentioned to you last fall, I view our efforts to improve the Command, Control, and Communications of our forces as perhaps our most important hardware initiative. Three factors have created a dramatic increase in the need for and the priority we are giving to modernizing our C^3I capabilities. First, the increased emphasis we are placing on the responsiveness, mobility, and sustainability of our strategic and tactical forces requires more flexible, reliable, and enduring C^3. Second, the need to further integrate the operations of available forces requires improved standardization, interoperability, and connectivity of C^3 assets and those of our allies. Third, improvements in Soviet Electronic Warfare capabilities require C^3I capabilities that are significantly more resistant to Soviet exploitation, jamming, and electronic combat, and that can be rapidly reconstituted if degraded. We have accordingly assigned the same priority to our C^3I system modernization as that given to new weapon systems, and are working to integrate C^3I acquisition with the weapons supported.

The importance of improving--I am tempted to say creating--an effective chemical warfare capability is discussed in Chapter IX of my statement. The Soviets are ready and apparently willing to employ chemical weapons. Long standing deficiencies in our current retaliatory and defensive capabilities encourage rather than deter Soviet use. We recognize this critical deficiency in U.S. deterrent capability and have proposed a major increase in our resources applied to chemical warfare. We are emphasizing the production of defensive systems and retaliatory chemical munitions, and increasing the readiness and sustainability of our stockpiles and weapons.

Finally, but certainly not the least in importance, is our Science and Technology programs. I have already described the importance I am placing on speeding the transition of U.S. technology to deployed military systems. To do this, we need to improve our methods of relating the highest payoff technology areas in our basic and applied research programs to mission area requirements, and then apply sufficient resources to move them through the development process expeditiously. We must also improve our coordination and planning of cross-Service technologies so as to reduce unnecessary redundancy and exploit more fully promising developments that, in some cases, are receiving piecemeal support. The erosion of our technology base is a national problem and we are working the broader problem to determine what we can do to ensure the U.S. maintains a technological edge. I will be placing strong emphasis on focusing our science and technology programs on those subsystems that will be the critical paths of the future in systems development. This will require a strong commitment to advanced research, a commitment I hope you will join me in making. In order to find these critical subsystems I recently asked Dr. George H. Heilmeier, who is the Vice President of Research, Development and Engineering at Texas Instruments, to lead a Defense Science Board study of technologies that offer an "order of magnitude" improvement in needed military capabilities. George did a fine job and I urge you to read his report.

Another issue that Dr. Heilmeier addressed in his report was the status of basic research in our universities and DoD's relations with our leading research center's of excellence at our universities. I have spoken to this committee before regarding my concern for the role our universities play in the national program for research and development. I share the belief of the Congress that the nation is facing a crisis in supplying technical personnel to maintain the military and economic security of the country. I plan to continue increases in basic research support to universities, to effect improvements in procurement policies and regulations, to reach an accommodation with universities on improvements in export control procedures, and to upgrade selected equipment in the universities where it will add to their capability for research in the high leverage technologies needed by DoD. The crisis facing our universities is of course a national issue which deserves the attention of the entire government. I'm pleased to say that Dr. Keyworth, the President's advisor on Science and Technology agrees with this and has strongly supported our efforts to improve the research capabilities of our universities.

While noting the crisis in our universities it is important to also mention the valuable role played by our DoD in-house laboratories in the DoD acquisition process. They provide us a cadre of people with state-of-the-art knowledge who do not have commercial allegiances and can respond quickly to DoD needs. Their use is particularly necessary in areas where limited non-DoD expertise (chemical warfare, ordnance disposal, etc.) exist. It is highly desirable to do a part of the experimentation, testing and evaluation in-house and to use the expertise developed to determine the direction technology should take. And finally, we need smart technical buyers and a corporate memory of past successful technical, fiscal and procurement approaches to our R&D problems. Our own Laboratory Management Task Force and the DSB study have made recommendations concerning personnel practices that might be improved, the use of lead laboratories in selected technologies, the establishment of graduate fellowships, improved coordination of programs and the review of larger demonstration programs. I have strong confidence in our in-house laboratories and am vitally interested in improving their health. The management challenge is to secure the most from each engineer and scientist we have on board and I plan to make this one of key objectives.

I asked Dr. Robert Hermann, formerly an Assistant Secretary of the Air Force, to head a group to work on the laboratory recommendations. Bob expects to have a draft report to me in the near future. I will be more than happy to return and discuss Bob's findings when his report is complete.

In conclusion, the achievement of our goals depends upon Congressional approval of our programs and the resources needed to implement them. I intend to work closely with this and other cognizant Congressional committees and their staffs to ensure that our RD&A programs are adequately explained and justified. What I ask in return is prompt action in a number of areas to redress serious quantitative and qualitative imbalances in deployed systems. And once we make decisions, we must stick with them to reduce program instability, which has been one of the most serious causes of cost overruns. I urge your support for these efforts.

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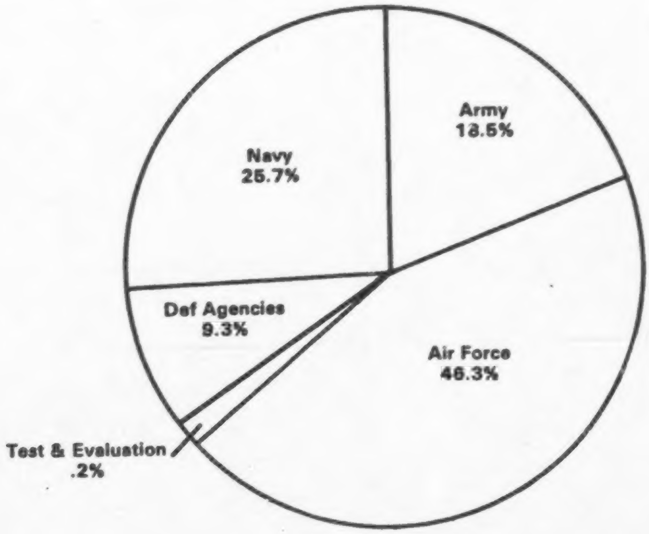
APPENDIX A

RDT&E BY COMPONENT
($ MILLIONS)

	FY 1981	%	FY 1982	%	FY 1983	%	FY 1984	%
Army	3,124.3	18.8	3,609.5	18.0	4,484.0	18.5	5,284.7	19.3
Navy	5,024.9	30.2	5,807.1	29.0	6,232.3	25.7	7,746.5	28.2
Air Force	7.133.3	42.9	8,876.3	44.3	11,220.4	46.3	11,448.0	41.7
Defense Agencies	1,308.9	7.9	1,697.6	8.5	2,259.9	9.3	2,912.1	10.6
Defense Test & Evaluation	42.1	.2	53.0	.2	60.0	.2	63.7	.2
TOTAL RDT&E	16,633.5		20,043.6		24,256.6		27,455.1	

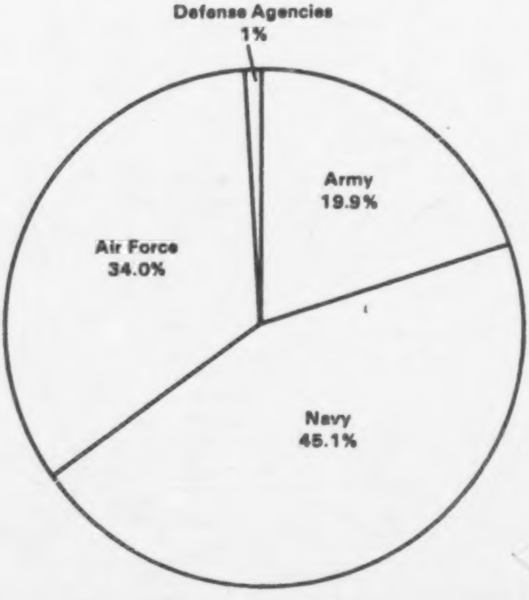
FY 1983



PROCUREMENT BY COMPONENT
($ MILLIONS)

	FY 1981	%	FY 1982	%	FY 1983	%	FY 1984	%
Army	10,521.7	22.0	14,172.0	21.7	17,829.7	19.9	20,233.1	20.1
Navy	20,145.3	42.2	26,665.4	40.8	40,403.1	45.1	37,534.5	37.2
Air Force	16,779.0	35.1	24,002.8	36.7	30,429.8	34.0	42,048.2	41.7
Defense Agencies	321.5	.7	521.5	.8	890.3	1.0	1,010.1	1.0
TOTAL PROCUREMENT	47,767.5		65,361.7		89,552.8		100,825.9	

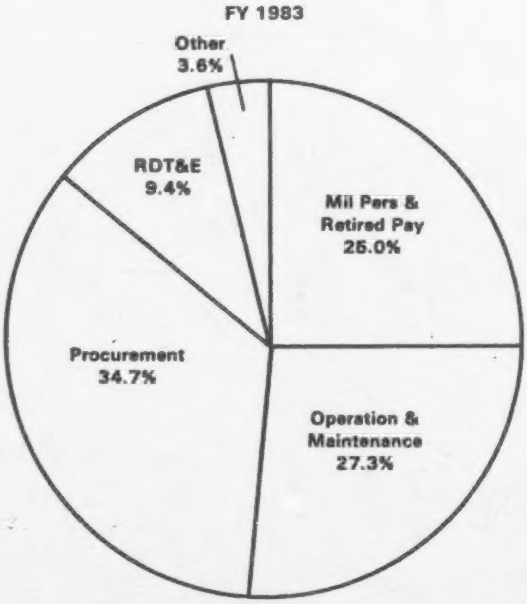
FY 1983



RDT&E/PROCUREMENT AS % OF DOD

($ MILLIONS)

	FY 1981	%	FY 1982	%	FY 1983	%	FY 1984	%
Mil Personnel	36,746	20.9	43,005	20.1	47,928	18.6	52,180	18.3
Retired Pay	13,724	7.8	15,036	7.0	16,511	6.4	17,732	6.2
Operat & Maint	55,245	31.4	62,990	29.4	70,434	27.3	75,166	26.3
Procurement	47,768	27.1	65,362	30.5	89,587	34.7	101,938	35.7
RDT&E	16,634	9.4	20,044	9.4	24,349	9.4	27,656	9.7
Mil Con	3,422	1.9	5,061	2.4	5,447	2.1	7,008	2.5
Family Housing	2,028	1.2	2,278	1.0	2,814	1.1	2,980	1.0
Spec Frgn Curncy	3		3		4		3	
Stock Funds	525	.3	456	.2	910	.4	795	.3
TOTAL	176,094		214,235		257,983		285,458	



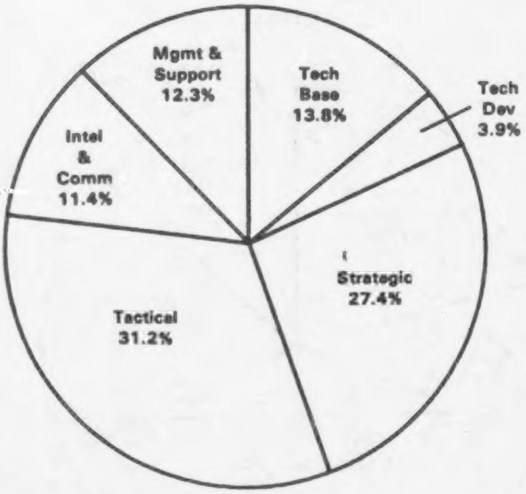
NOTE: RDT&E and Procurement amounts on this page will be higher than other tables due to their containing a spread of contingency funds.

RDT&E BY MISSION CATEGORY

($ MILLIONS)

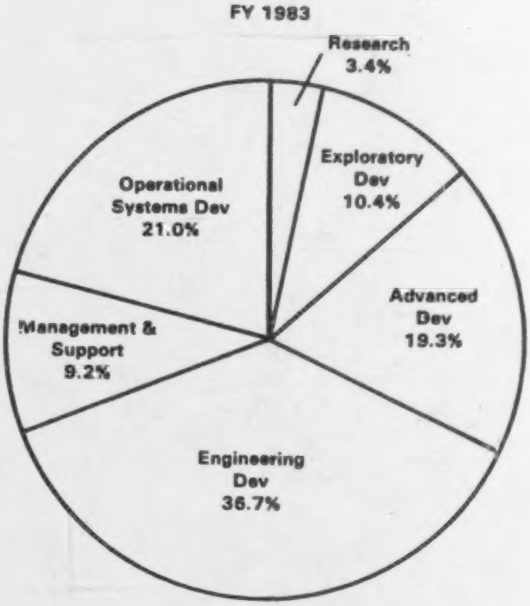
	FY 1981	%	FY 1982	%	FY 1983	%	FY 1984	%
Technology Base	2,600.1	15.6	2,907.1	14.5	3,336.9	13.8	3,807.6	13.9
Advanced Tech Dev	593.3	3.6	735.5	3.7	951.7	3.9	1,261.1	4.6
Strategic Prog	3,440.4	20.7	4,643.4	23.1	6,647.1	27.4	7,762.5	28.3
Tactical Prog	6,129.7	36.8	6,899.4	34.4	7,575.7	31.2	8,095.4	29.5
Defwide Intel & Communications	1,632.1	9.8	2,202.0	11.0	2,772.5	11.4	3,312.4	12.0
Defwide Mgmt & Support	2,237.9	13.5	2,655.9	13.3	2,972.6	12.3	3,216.2	11.7
TOTAL RDT&E	16,633.5		20,043.6		24,256.6		27,455.1	

FY 1983



RDT&E BY R&D CATEGORY
($ MILLIONS)

	FY 1981	%	FY 1982	%	FY 1983	%	FY 1984	%
Research	614.8	3.7	694.6	3.5	828.1	3.4	927.8	3.4
Exploratory Dev	1,985.3	11.9	2,212.5	11.0	2,508.8	10.4	2,879.8	10.5
Advanced Dev	2,806.3	16.9	3,475.9	17.4	4,689.4	19.3	6,826.5	24.8
Engineering Dev	6,394.6	38.5	7,683.3	38.3	8,918.9	36.7	8,534.2	31.1
Mgmt & Support	1,735.9	10.4	2,008.9	10.0	2,223.8	9.2	2,409.4	8.8
Operational Systems Dev	3,096.7	18.6	3,968.4	19.8	5,087.6	21.0	5,877.3	21.4
TOTAL RDT&E	16,633.5		20,043.6		24,256.6		27,455.1	

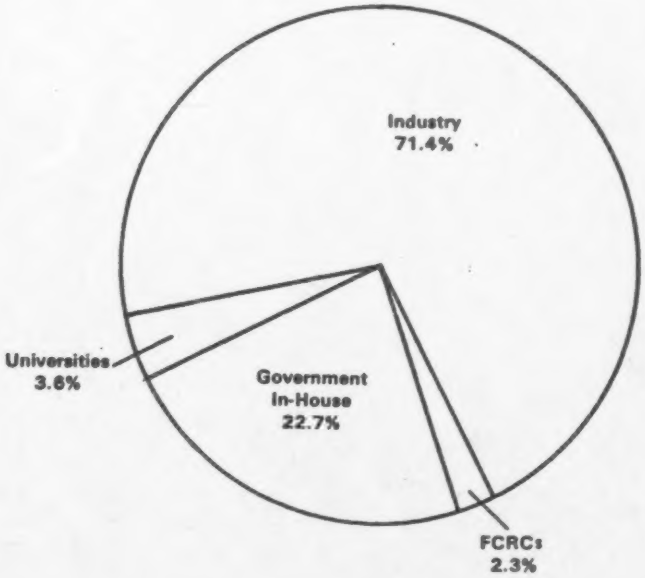


RDT&E BY PERFORMER

($ MILLIONS)

	FY 1981	%	FY 1982	%	FY 1983	%	FY 1984	%
Industry	11,193.5	67.3	13,877.2	69.2	17,315.2	71.4	19,748.8	71.9
Govt In-House	4,415.9	26.6	4,901.1	24.5	5,496.5	22.7	6,103.3	22.2
Federal Contract Res Ctrs (FCRCs)	405.0	2.4	484.5	2.4	564,7	2.3	621.3	2.3
Universities	619.1	3.7	780.8	3.9	880.2	3.6	981.7	3.6
TOTAL RDT&E	16,633.5		20,043.6		24,256.6		27,455.1	

FY 1983



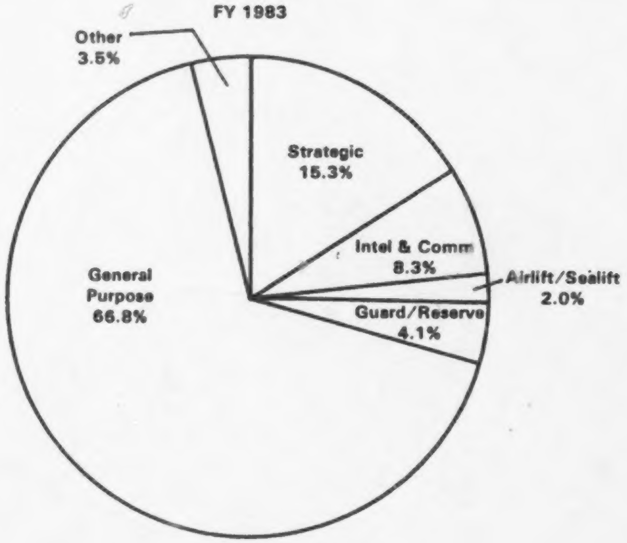
RDT&E BY DEFENSE PROGRAMS
($ MILLIONS)

	FY 1981	%	FY 1982	%	FY 1983	%	FY 1984	%
Strategic Forces	682.7	4.1	713.2	3.6	853.8	3.5	882.1	3.2
Gen Purp Forces	712.9	4.3	848.1	4.3	1,250.1	5.1	1,386.9	5.1
Intel & Communs	1,660.9	10.0	2,362.0	11.8	2,953.3	12.2	3,579.5	13.0
Airlift/Sealift	26.9	.2	30.5	.1	12.6	.1	7.3	
Res & Dev (Prog 6)	13,536.9	81.4	16,075.3	80.2	19,169.0	79.0	21,577.7	78.6
Cntrl Sply & Maint	10.3		11.0		13.7	.1	17.4	.1
Trng, Medical, Other	.6		1.0		1.2		1.4	
Spt of Other Nations	2.3		2.6		2.8		2.8	
TOTAL RDT&E	16,633.5		20,043.6		24,256.6		27,455.1	

PROCUREMENT BY DEFENSE PROGRAMS

($ MILLIONS)

	FY 1981	%	FY 1982	%	FY 1983	%	FY 1984	%
Strategic Forces	5,174.7	10.8	7,353.0	11.3	13,734.7	15.3	19,340.6	19.2
Gen Purp Forces	33,487.1	70.1	46,556.5	71.2	59,782.3	66.8	62,017.4	61.6
Intel & Communs	3,936.5	8.3	4,988.7	7.6	7,399.2	8.3	8,281.6	8.2
Airlift/Sealift	864.3	1.8	1,621.5	2.5	1,789.7	2.0	3,630.3	3.6
Guard & Reserve Forces	1,948.9	4.1	2,229.9	3.4	3,664.0	4.1	4,170.9	4.1
Central Supply & Maintenance	1,255.5	2.6	1,266.6	1.9	1,781.5	2.0	1,891.9	1.9
Training, Medical	625.4	1.3	838.0	1.3	923.1	1.0	1,107.7	1.0
Administrative & Assoc Activs	93.1	0.2	163.2	0.3	292.2	0.3	276.7	0.3
Support to Other Nations	382.0	0.8	344.3	0.5	186.1	0.2	108.8	0.1
TOTAL PROCUREMENT	47,767.5		65,361.7		89,552.8		100,825.9	



PROCUREMENT BY APPROPRIATION

($ MILLIONS)

	FY 1981	FY 1982	FY 1983	FY I984
Aircraft Procurement, Army	1,202.6	1,936.1	2,745.9	3,373.1
Aircraft Procurement, Navy	6,254.3	9,140.0	11,582.3	12,899.7
Aircraft Procurement, Air Force	10,297.6	14,021.9	17,756.7	24,036.5
TOTAL AIRCRAFT PROC	17,754.5	25,098.0	32,084.9	40,309.3
Missile Procurement, Army	1,544.9	2,155.2	2,846.6	3,333.9
Weapons (Missile) Proc, Navy	2,217.0	2,545.7	3,128.9	3,871.6
Missile Procurement Air Force	3,333.3	4,574.0	6,827.9	9.689.5
TOTAL MISSILE PROC	7,095.2	9,274.9	12,803.4	16,895.0
Weapons & Tracked Combat Vehicles, Army	3,374.2	4,002.3	5,030.7	5,702.6
Amunition, Army	1,558.7	2,302.5	2,639.0	3,024.1
Weapons (Non-Missile) Procurement, Navy	521.2	669.4	772.7	1,060.7
Shipbldg & Conversion, Navy	7,617.0	8,902.3	18,648.3	12,455.7
Other Procurement, Army	2,841.3	3,775.9	4,567.5	4,799.4
Other Procurement, Navy	3,029.9	3,676.6	3,970.2	5,259.2
Other Procurement, Air Force	3,148.1	5,406.4	5,845.2	8,322.2
TOTAL OTHER PROC	22,090.4	28,735.4	41,473.6	40,623.9
Procurement, Marine Corps	506.0	1,731.5	2,300.7	1,987.6
Procurement, Def Agencies	321.5	521.5	890.3	1,010.1
TOTAL PROCUREMENT	47,767.5	65,361.7	89,552.8	100,825.9

PREPARED STATEMENT OF DR. ROBERT S. COOPER

DIRECTOR

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

(U) The Defense Advanced Research Projects Agency invests in high technology for the solution of mid- to long-term National security problems and also provides technical management and guidance to multi-Service programs of National significance. The programs undertaken range from basic scientific investigations by which new phenomenology is discovered to feasibility demonstrations conducted in cooperation with the Services.

(U) The FY 1983 budget request for the Defense Advanced Research Projects Agency is $756.8 million, an increase of $80.5 million over the FY 1982 appropriation. This represents a growth of approximately 5.7% with adjustment for inflation. The proposed investment for basic research (6.1) is $112.1 million and will provide for a broadening of our science and technology base within both universities and industry. The principal research thrusts involve new material developments utilizing techniques such as rapid solidification and submicron processing; computer and communication sciences for developing new information processing technology that will form the basis for future intelligent, network-based, military systems; unconventional detection and target penetration research; and geophysical research to develop new technological options for monitoring nuclear explosion events.

(U) Our request of $636.6 million for exploratory development (6.2) in FY 1983, reflects the outgrowth/expansion of basic research in key technology areas; strategic efforts such as space surveillance, laser communications, and high energy laser technologies; tactical--in ocean monitoring and control, target acquisition and engagement and weapon technologies; particle beam technologies; integrated communications and control technologies; and material processing technologies.

(U) Lastly, the budget request includes $8.1 million for agency management and administrative expenses, to include salaries, travel, supplies, equipment and rent. The total budget request ($756.8 million) represents approximately 17.6% of the DoD's total investment in science and technology.

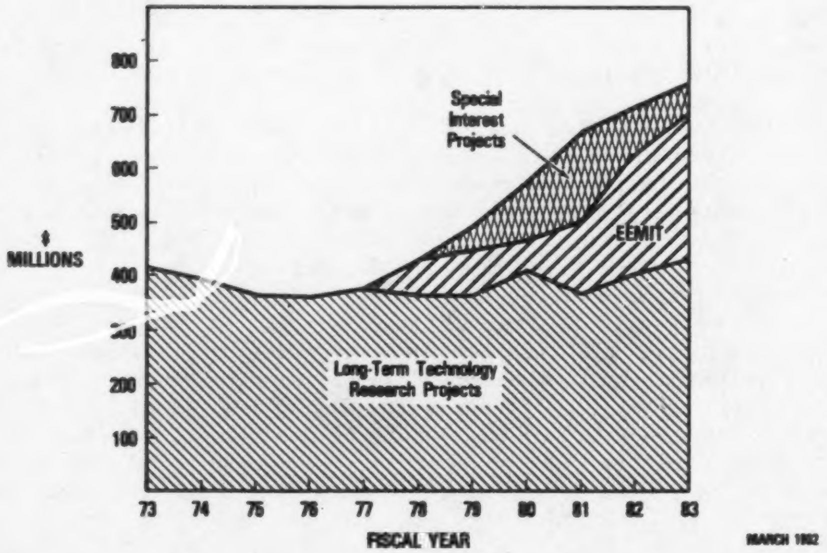
(U) Beginning in 1978 the Agency began what has become a period of substantial growth. This growth is due primarily to special interest projects and large scale technology feasibility demonstrations. The special interest projects are those which the Congress recommended for centralized technical management by DARPA. There are three programs within this category, namely:

Charged Particle Beam Technology, Assault Breaker and the Blue-Green Laser for submarine laser communications. The major technology demonstration programs are identified as experimental evaluation projects (PE 62711E). They are primarily Forward Swept Wing, Teal Ruby, Space-Based Laser, Advanced Space-Based IR Surveillance and classified programs. The relative contribution of these activities to DARPA's overall funding trends is reflected in the Figure below.

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

FUNDING TRENDS

(CONSTANT FY 83 DOLLARS)



(U) As can be seen from the chart, DARPA's investment in long term technology and research projects has remained almost constant in buying power during the last ten years. Program element descriptive summaries have been previously provided to the Committee which fully describes the Agency's proposed programs. Therefore, because of their National significance and the Committee's interest, I would like to use this opportunity to provide a brief report of our status and plans within the special interest and major feasibility demonstration programs.

(U) The Forward Swept Wing, now known as X29-A, is a manned technology demonstrator platform made possible primarily by advances in composite materials and digital flight control systems.

(U) Using these advanced technologies, large scale aeroelastically tailored composite wings have been designed, fabricated, and tested and have conclusively demonstrated the ability to solve the aerodynamic structural divergence problem which has previously prevented exploitation of the advantages of the forward swept wing configuration. These include substantial reduction in air frame costs and weight, superior low speed capabilities and high angle of attack performance, as well as high aerodynamic efficiency. Our analysis indicates that a forward swept wing aircraft could be as much as 25-30% lighter than an equivalent aft-swept aircraft, or have the equivalent of a 25-30% range/payload performance improvement.

(U) The excellent low-speed stability and control characteristics, lift capability and enhanced transonic performance make substantial new capabilities possible; particularly significant where runway denial or operation from small ships is a concern. Final design has been completed, a single contractor has been selected, and fabrication has begun--first flight is scheduled for early 1984.

(S) The Submarine Laser Communications (SLC) program is a joint DARPA/Navy effort to develop the technology necessary to provide critical communications, using blue-green lasers, to strategic missile submarines (SSBNs) and attack submarines (SSNs) at (deleted) depths. It is expected that success in development will substantially enhance our submarine force fighting effectiveness with increased robustness and survivability of the SSBN command, control, and communications (C^3) system well into the post-attack period. In addition, it should allow critical messages to be sent to SSBNs without compromising the submarine's natural covertness.

(U) The focus of our efforts is on development of an airborne pre-operational demonstration system which can provide substantial capability in the near term. In addition we are concurrently pursuing the technology which will eventually permit a satellite based system design and development.

(S) Major accomplishments include the demonstration of communications from an aircraft, flown at (deleted) through clouds and water to a Navy submarine at depths of more than (deleted). By 1984, aircraft and submarine equipment will support communications to (d) or more in full daylight through heavy clouds.

(S) The Particle Beam Technology program emphasizes charged particle beam concepts for applications in a variety of advanced weapon systems. Interest in these concepts is stimulated by the expectation that particle beams can deliver large amounts of energy at light speed and lethally deposit it deep within a target with high coupling efficiency. The potential applications include ship defense; (deleted).

(S) The key issue for charged particle beams is their ability to propagate in the atmosphere. The essential next step in research is to provide the required high-energy accelerator to demonstrate the feasibility of predictably propagating powerful electron beams to distances of military interest (deleted). Construction of the advanced test accelerator (ATA) at Lawrence Livermore National Laboratory is scheduled for completion at the end of FY 1982 and in FY 1983, charged particle beam research efforts will focus on achieving full operation of the ATA and on developing the models and diagnostics required to interpret ATA propagation experiments.

(U) Work is also proceeding on the development of neutral particle beam systems which constitute a third alternative for space-based directed-energy weapons, along with chemical lasers (TRIAD) and short wavelength lasers; these latter two are currently receiving primary emphasis and funding.

(U) The Space-Based Laser (SBL) development centers on the DARPA TRIAD in support of generic SBL system technology. In addition, there are substantial technology programs at DARPA and in the Services both in support of our chemical laser engineering feasibility effort and research leading to shorter wavelength systems which may eventually provide even greater SBL system capability. The major experimental evaluation projects in this area and those intended to demonstrate basic feasibility of SBL, are the TRIAD programs.

(S) TALON GOLD is an experiment carried by the space shuttle, to develop and test the requisite pointing and tracking capabilities of an (deleted). The performance goals represent (deleted) improvement over previously demonstrated pointing accuracies. Success in this work will have important implications in all (deleted) as well.

(S) ALPHA is a high-power, chemical laser, ground-based demonstration to establish the feasibility of a (deleted) laser suitable for operation as a (deleted).

(S) LODE (Large Optics Demonstration Experiment) will fabricate a large (deleted) mirror and demonstrate (deleted) complex interactive control systems, and energy management technology in a series of ground-based experiments that simulate the space environment.

(S) The TRIAD programs are all scheduled for demonstration in the (deleted) period to permit a decision on possible (deleted) at that time. The necessary work in system design and evaluation will be undertaken by the Air Force in a closely coordinated effort.

(S) Teal Ruby is a space-based experiment to evaluate infrared surveillance for detection of (d) aircraft targets against the earth's clutter background. In addition, Teal Ruby will provide proof-of-concept for other (deleted) surveillance functions, develop a comprehensive and global radiometric background data base, and space qualify first generation advanced IR sensor surveillance technology.

(S) The Teal Ruby experiment represents the first large-scale implementation of a two dimensional IR detector array and will also use the lightweight techniques developed in the HALO technology program for design and manufacture of the (deleted) Teal Ruby telescope. It will be launched by the shuttle in early FY 1984 and will operate in space for a minimum of one year as the primary payload of the Air Force space test program satellite P80-1.

(S) The Advanced Sensor Demonstration (ASD) program is an aggressive technology development effort for second generation IR staring technology. The effort will pursue critical technologies expected to mature in the 1987-1988 period for detection and tracking of (deleted) against the earth's background; and (deleted) (deleted) against a sky background. The preliminary concept of such a sensor incorporates a telescope with a (deleted) aperture, (d) optical filters, a focal plane consisting of approximately (deleted) detectors, a cryogenic refrigerator to cool the plane, and an adaptive processor that controls the system and can convert sensor data into target track information for use by small ground terminals.

(S) The Assault Breaker program is being completed in FY 1982. It will have successfully demonstrated the technology for the standoff acquisition and destruction of armored formations at ranges as great as(deleted)beyond the forward edge of the battle area. The system includes Assault Breaker ground launched missiles (PATRIOT and LANCE) and the associated Pave Mover low probability of intercept radars. The radar provides both the standoff surveillance to find and track (deleted) and the guidance for standoff missile attack. The missiles and their munition dispensers provide the capability for delivering terminally guided submissiles and submunitions to a high degree of accuracy. This demonstrated technology is being transferred to the Army and Air Force for follow-on development and fielding.

(U) I believe the Defense Advanced Research Projects Agency program provides a sufficiently broad and balanced investment in advanced research to insure we meet with no surprises from our adversaries and that it will also provide the nation with the know-how required to insure a viable means for acquiring the technologically advanced weapons upon which our strategy for countering the numerical superiority of our adversaries depends.

(U) With your continuing support, we can accomplish these goals.

HEARING PROCEDURE

Senator STEVENS. We are going to follow the procedure again this year of having a 5-minute rule so that each member can have a chance to ask some questions. I know they all have other meetings to go to and I am delighted to see they are here to hear your statement and that of your colleagues, Doctor.

I have just two questions to start out with.

STUDENT LOANS FOR GRADUATE STUDENTS

Did you have any input at all on the administration's plan to curtail student loans for graduate students? When I saw that, I was mindful of the testimony we had last year about the high percentage of foreign students and the work that the Department was trying to do to stimulate some contact with the universities. It seems to me to be counterproductive to be limiting loans to our own students. By definition those loans are only going to U.S. students in the graduate level.

Did you have any contact with them and can you tell us, in your opinion, isn't that counterproductive to your efforts?

Dr. DELAUER. We did not have much of an input. It was discussed briefly. To answer your question regarding counterproductivity, on the face of it, it certainly is, but our investigation has indicated that to a certain extent the economic situation of the students, particularly the graduate student in engineering, is not the root cause of our lack of Ph. D. students. we generally get about 2 to 1 or 3 to 1 at the MS level, but at the present time there is such a shortage in industry of good technical people trained at good universities that when they finish at the MS level, the job market is so good that they make a decision to take advantage of the opportunity.

So, you see, as they complete the MS level, two out of three U.S. students leave and almost all the foreign students stay. They are preselected anyway. You end up with a 50–50 proposition. So one of the problems is the draw of industry.

The second problem is that the draw of the industry is also pulling young faculty members out of teaching in graduate school. We are not getting the young assistant professors and the young teaching assistants, that normally provide substance to a good graduate school. They are also finding opportunities better on the outside. The scholarship program, other than providing students for them to work on, won't really handle the young staff member. He needs research grants. He needs some way to give him an opportunity to make a trade-off rather than just going out and saying, it looks greener on the outside than it does here at the university. So we are working on that problem very, very hard at the present time.

Senator STEVENS. This committee would be most interested to work with you on that problem.

PILOT TRAINING PROGRAMS

The second question is about pilots. As I looked through this budget, we are increasing again acquisition of aircraft. I don't see anything in the budget that indicates any speed up in the training of pilots for the additional aircraft that the Air Force will have. Have I missed that?

Dr. DELAUER. I don't think you have missed it. It is not included in my statement because I don't handle the manpower side. I think when you get a chance to talk to Larry Korb or the Secretaries of the services you will find that the retention in the last year or so has been much better and the requirement for training new people in the short term is not as great as it was when the retention rate was much lower at all levels, not only in the highly skilled area. Not only in aviation, but in submarines they are getting a higher retention rate which has helped them a little bit.

Senator STEVENS. Thank you very much.

Gentlemen, I do hope we can try to recognize everyone along the table.

Senator Schmitt, you are first.

Senator SCHMITT. Thank you, Mr. Chairman.

DOD PERCEPTIONS OF SPACE ACTIVITIES

Mr. Secretary, as you know, I watch over the space activities of this country as carefully as I can and if I had to summarize the defense perceptions of space I would say that they are essentially nonexistent relative to the vision that I think they should have.

The Secretary of Defense a few months ago after the first successful flight of the *Columbia* said that this Space Shuttle is not a high-priority for the Department of Defense. He said that publicly. The Secretary of the Air Force just the other day said there was no interest politically or financially in the Secretary's office in the procurement of additional Space Shuttles. When one looks at the organizational breakout of how space policy as such is implemented within the Department of Defense one cannot see any coherent thread.

How do you view the Defense Department's vision of space as an adjunct to our national defense?

Dr. DELAUER. For the recored, because privately you know how I feel about space exploration. I have been a part of it since 1958. I was a program manager on the first space probe this country put up. So I have been supportive of the whole space program. There is a question of manned space versus unamanned space. That has always been an issue in regard to the utility of man in space and that is really what you are kind of referring to.

Senator SCHMITT. No, Mr. Secretary, I am not. I do not detect in the Department of Defense and certainly not in the Air Force anything other than a view that space is purely to support ongoing terrestrial activities and that it has no long-term role in augmenting and enhancing our ability to keep the peace.

I will be very serious with you. I don't think there is that kind of vision at the upper levels of the Air Force or in the policymaking circles of the Department of Defense or otherwise I wouldn't be seeing statements like this.

MILSATCOM PROGRAM

Dr. DELAUER. In my statement you will find that we have indeed emphasized the greater utilization of space in the future. We have instituted the MILSATCOM program. We have instituted in the classified area significant new programs, some with very high technology for the purpose, just as you said, of enhancing our ability to keep peace. Those programs are well on their way. They can't be discussed in an open hearing, but I will take the time to come over and talk to you about them.

Senator SCHMITT. Mr. Secretary, I am familiar with those, but I still say that they are merely additions to what you already are trying to do by other means here on Earth or by the standard more acceptable space-related unmanned activities. But when it comes down to really looking into the future and the directions that the Space Shuttle and thrust augmentation for the Space Shuttle and high energy upper stage development you are expecting NASA to carry the entire financial burden.

Dr. DELAUER. That is not really true.

Senator SCHMITT. I know what you are going to say. You are going to say you are constructing Vandenberg and you have got a plan for a consolidated space operations center, but you are not willing to invest in the aircraft, spacecraft that are going to use those facilities.

Dr. DELAUER. That just isn't true.

Senator SCHMITT. Well, tell me why it isn't true.

SHUTTLE UTILIZATION

Dr. DELAUER. All right, let me rattle them off. The military spacecraft utilization of the Shuttle over the next 5 years is very, very high.

Senator SCHMITT. But that is an investment in payloads, Mr. Secretary, and I am talking about making sure we have them.

Dr. DELAUER. It is a reuseable spacecraft. The Shuttle is supposed to be reuseable. There are some issues in regard to whether we should buy the fifth Shuttle. I support buying the fifth Shuttle. It is a question of when. I support keeping the industrial base that produced the Shuttle. That is in my statement. We support that. ARPA has a space program in high-energy charged particle research that I can't talk about in detail here. We have a greater effort being expended this year in advanced high-energy and particle beam technology than we have in the chemical lasers as far as technology is concerned.

Senator SCHMITT. Mr. Secretary, we are in a position where as of now we are going to procure four orbiters.

Dr. DELAUER. That is right.

Senator SCHMITT. The longer we wait on the fifth or any block buy for six, seven or eight, the higher the cost of those becomes. The Air Force seems to be unwilling on the basis of a few millions of dollars over the next year or two to preserve a relatively low-cost option for Space Shuttles. You know as well as I do that four Space Shuttles are not going to be able to serve both the civilian and defense sector needs in the foreseeable future, not to mention what we might be doing with some of the other activities that you mentioned.

LARGE DUMB BOOSTER

Dr. **DeLauer**. As you know, we have a study underway looking at what we call the large dumb booster which is using Shuttle assets in a way so they can have an unmanned large space payload capability. We have a program with the Air Force looking at DOD needs for a high-energy upper stage. We looked at it just recently and decided that it wasn't the time to go into the stubby Centaur work that NASA had taken a look at after they dropped out of the IUS. The IUS is the most advanced solid upper stage that has ever been built. We have yet to fly the first one. We have made the investment of finish buying those out. They are very expensive, and we are taking a look at whether or not there can be a lower cost option for the high energy upper stage.

When you look at the payload requirements for the next 5 years I think we are pretty well covered with a question of the proper distribution of assets. When you look beyond the 5-year period it appears that we do have to have a better high-lift payload, particularly for synchronous orbits. We have that study underway.

DOD SPACE POLICY

As you know space policy group in the Department being run by the policy organization to establish exactly what you are advocating, a space policy for the Department of Defense.

Senator **Schmitt**. Well, Mr. Secretary, in my mind it is just another study. The Defense Department does have continuity and in the last several years I have seen no perception of what the future in space means for the defense of this country, no significant perception. It is the kind of thing that you have described. It is a 5-year view and not a 10-, 15-, and 20-year view. As a consequence, NASA is struggling to maintain a procurement of orbiters, a development of a thrust augmentation and a high-energy upper stage that will serve their purposes at significant degradation of the civilian mission. Where if we could just somehow or another pull these efforts together we would have what both Defense and the civilian sector needs at a significantly lower cost.

As I view it, Defense is going off in one direction now and NASA is going off in another. We ought to be developing a high-energy upper stage for both NASA and Defense purposes. Instead, we are going to end up with a big gap in here without the kind of capability that the Centaur could provide us and let us then get on with developing a real high-energy upper stage, a very high-energy upper stage reusable capability. Instead we are probably going to just go out and procure another Centaur type vehicle if I read what the Defense Department's plan is, or at least the Air Force's plans are right now.

Mr. Secretary, I don't want to monopolize the time and I won't but you and I need to sit down and talk because, frankly, it is not obvious in all of the time that I have spent in all of my discussions with the Air Force and with other members of the Defense Department that there is any space policy perception commensurate with our times in the Department of Defense. Your organizational structure doesn't show it, your procurement policy doesn't show it, and in fact the statements that you have made today just shows a very narrow, short-term vision of what this new era of space brings for our national defense.

The fact that you would talk about building a big dumb booster on the basis of shuttle technology as a major accomplishment still tells me that there is no understanding of the role of man in space in the Department of Defense.

SPACE MISSIONS

Dr. **DeLauer**. There are two missions, Senator. There are missions where man is needed and there are missions where men are not needed. You know that.

Senator **Schmitt**. But it is not clear that the Air Force understands what man's role is going to be in space in the future or they would be trying to work out an investment strategy by which the needs of that future are going to be met.

Mr. Chairman, the Secretary and I will have to have some other conversations.

Senator **Stevens**. Doctor, I would encourage you to have that conversation. I might make some suggestions as to who else might be involved in it because there are some other members on the committee who are active on it. I can assure you that we look to Senator Schmitt for guidance in this area and it would be very helpful to us if you could have the conservation you suggest.

Senator Rudman.

Senator **Rudman**. Thank you, Mr. Chairman.

EVOLUTION IN WEAPONS PROCUREMENT

Dr. DeLauer, I want to talk to you just briefly about some of your testimony last year and some of Dr. Frank Carlucci's testimony last year and tie them together.

Last year both you and Deputy Secretary Carlucci spoke of the need to approach our whole weapons procurement and weapons development system in more of an evolutionary way than a revolutionary way. An examination of the enormous cost growth which has been of major concern to this subcommittee indicated to a large extent that the cost growth came from projects that were conceived as being at one level of the state of the art and ended up at something quite different.

My primary question to you this morning is: What have you done in the past year in terms of developing, for the lack of a better term, an early warning system within your own office to determine which of these programs is going to go so far out of control in terms of what the cost benefit will be to the Defense Department that they are not worth pursuing, that they ought to be dropped that they ought to be changed?

I would like to know what you have done in that area because in my view that is the single most opportune area for achieving savings in future defense budgets, maybe not in this year's but in future defense budgets.

PREPLANNED PRODUCT IMPROVEMENT

Dr. DELAUER. Well, as you know, one of the 32 Carlucci initiatives is preplanned product improvement. We are looking at that on every one of our programs. We have, not necessarily at the Department's initiative but I think it is pretty much at the Congress initiative, instituted what essentially is called AHIP program, which is the improvement program on the helicopters. We have taken the existing fleet of scout helicopters and have essentially run a competition where they are going to be upgraded and have their life extended for almost another 15 years.

Out of that program, which was a competitive program between Hughes and Bell which Bell won, about 50 percent of the previous assets in airframe and other parts of the helicopter will be used as a basis for increasing the performance. We will increase the performance and increase its war fighting capability all out of that one particular program. So we are doing that.

CRUISE MISSILE PROGRAM

I have undertaken an internal examination within the research and engineering organization, and they are going to bring their recommendations to me very shortly, on the whole question of rationalizing the cruise missile program. As you are well aware, we have both classified and unclassified cruise missile programs. There are many in number. The one main characteristic of them is that they use pretty much the same subsystems. In the case of the land-attack version, they use the same guidance system whether they are Navy or Air Force. Sometimes against imaging targets they either use an electro optical or they use an infrared system that will provide the same kind of sensing and guidance. We are looking at rationalizing those and focusing down and eliminating the duplication.

ASSAULT BREAKER PROGRAM

As I mentioned in my statement, we have cut out quite a few programs, particularly in the research and development area, that showed us that they were not going to come to fruition in a certain period of time. On the other hand, there are some promising technologies and some promising programs that have reached the stage where we think they ought to be introduced into a weapons system program such as Assault Breaker. I am having some problems getting that program pushed up early enough so that we can eliminate a lot of other battlefield tactical weapon systems and work on longer range solutions.

It is a reasonably complicated process because you have to keep assessing the threat. As you know we are in the position right now, Senator Rudman, of deciding whether or not to make some major investments in additions to the F-16 program by the addition of some extended capability in pods, both for night attack, target recognition, and weapon delivery.

Facing us is a choice that we can make of essentially upgrading the whole airplane, and the Air Force designation is an F-16F where these additions would be included in the airframe itself, probably at less cost. We have to make that decision very shortly, but those are the kinds of things that we are trying to do. We are successful in some cases and we haven't been too successful in others.

ACTIVITIES OF DEFENSE SCIENCE BOARD

Senator **RUDMAN**. Let me just follow on. I believe I am correct in stating that the Defense Science Board works generally as a civilian advisory board to your office or generally in the Secretary's office, but you do work with them.

To what extent are you using them to evaluate some of the new technology that is proposed for research and development in major weapons systems, to assess from this group of incredibly competent people representing a whole gamut of technology around the country as to whether or not a particular technology that you wish to pursue is realistic in terms of both time and cost?

Dr. **DELAUER**. Well, I have had them busy. They have never been so busy as they are right now. I mentioned the one that George Heilmeier did this summer which has to do with picking out what I would call the kernels of real advanced technology and concepts. So that was one. I mentioned Ivan Bennett's on how to handle the universities.

COMPUTER USE IN WEAPONS SYSTEMS

Last year I had Bert Fowler take a look at the SOTAS which was cancelled by Congress. We were restructuring the program when that happened, but I had him take a look at it in his group. We have had the DSB look at the whole question of imbedded computers. As you know, this is a very sensitive issue. It is an issue not only in the administration but in Congress in regard to whether weapons system computers should be purchased in the same way as business computers.

U.S. POSITION IN ELECTRONIC WARFARE

That study is now finished. It was headed by a fellow named Crowley from BTL and we are about through on that one. Bill Perry, my predecessor has just finished his report on very high-speed integrated circuits and where we ought to go on that and how we should have some rules. Last night I read a completed study by a Defense Science Board panel headed by Joe Shay that addresses electronic warfare. There are very strong recommendations in the study and the fact that we are in bad shape on our electronic warfare and unless we do something about the electronic warfare, either their recommendation or ours, we are just wasting our money. Of course, all these reports are made to the Secretary and he has to come back and push us on this.

Tom Reed did the ABM study last summer. Jim Fletcher, a former NASA Administrator, is going to be working with T.K. on looking at the vulnerability of the continuous patrol aircraft before we take the next step on MX basing. This is one of the issues on appropriations versus authorization. We can't spend any of the money appropriated for that because of the authorization. So we are trying to handle that separately.

HOLES PREDICTED FOR DEFENSE SCIENCE BOARD

Senator **Rudman**. Well, I believe my time is up. I would just say in conclusion, Mr. Chairman, that I think one of the very major roles that the Defense Science Board can play, and I say that it is playing a more active role now than it has from the information that I have received on it from members, is that in programs such as the F-18, just to pick, had the right people looked at the program years ago that maybe a different decision might have been made, and rather than try to have one aircraft do everything it well might have been we might have had two that might have been deployed with less problems and less cost. Now you may not agree with that conclusion, but that is the kind of thing that the Defense Science Board I think could play an active role in.

Dr. **DeLauer**. This is just as aside. You remember the competition between the F-16 and F-17 before the F-18. Of course, I wasn't in this job at that time, but the competition was very close. My personal advice to the head of the Air Force Systems Command, Sam Phillips, was to buy both of them and keep them competing against each other over a period of time to keep the cost down. His answer was we can't afford it.

So now what has happened? We bought both of them, but we have separated them by about 3 years. Now they are not in a competitive posture of the United States, but Australia and Canada and everybody else that buys them uses those programs as the greatest competition in the world and the two contractors are falling all over themselves trying to give each one of those guys the best deal in town. We are not going to do that any more.

Senator **Rudman**. I am glad to hear that.

Senator **Stevens**. Senator Andrews.

ATB PROGRAM

Senator **Andrews**. Doctor, a few weeks ago the statement was made during a Senate Armed Services Committee hearing that the ATB had an IOC of 1991. We have had these figures bandied about about everything from 1989 to I think 1996 or thereabouts. Does this year coincide with the actual DOD expectations and how does this result to the industrial capabilities for production of the bomber and the state of the art and all the rest? This is a question that is pretty important and I am sure you know all the reasons why it is important.

Dr. **DeLauer**. Mr. Andrews, I am not going to blurt our any date.

Senator **Andrews**. Well, your colleagues have been blurting out——

Dr. **DeLauer**. No, no, I have been the one accused of it if you will by George Wilson. What I have offered this morning is that we would like to come back and brief this subcommittee on the ATB program in toto. It has to be a classified briefing.

Senator **Andrews**. I know. You will go into this classified hearing type format, but the American public has a right to know and they are putting the money up for it. I wouldn't be asking the question if people in your shop in high positions hadn't been quoted directly. They haven't denied it. That is where we have got the problem. Somebody is going to have to say that these years are accurate or that they are inoperable, but having these years floating around just confuse the dickens out of the taxpayers.

Dr. DeLauer. Well, Mr. Andrews, when that program was presented by the Secretary last year, he said we had a schedule at that time, and the schedule has not changed, that the ATB would be available in some interim operable capability in the early 1990's. We stand by that.

MX MISSILE BASING

Senator Andrews. In the field of the MX, and that is another big issue that we have got, I questioned Secretary Weinberger when he was here about the cost effectiveness of taking a silo that is now holding a Minuteman III, which the Russians have targeted, which is the reason we wanted to go to a mobile missile, and it has 3 warheads in that targeted silo, and now we are going to stick a missile with 10 warheads in that targeted silo and in effect give the Russians 3⅓ times the number of warheads to be wiped out by their attacking missile.

I can't, you know, and I am no engineer, I am a farmer, but you have to be fairly practical in that business of farming or you really go broke fast, and I can't see any practicality whatsoever in sticking 10 warheads in a targeted hole where 3 warheads are in jeopardy.

Can you explain a little better than Secretary Weinberger did why this makes sense?

Dr. DeLauer. I may not be able to do it better, but I will try.

Senator Andrews. Well, he didn't do it at all.

Dr. DeLauer. Well, let me talk to you a little bit about it. The temporary emplacement of the MX missile in Minuteman III silos has been our program. Why? Because we will have MX missiles available off the production line before the permanent basing mode is available. As he has stated, it is better to place them where they contribute to the deterrent than leave them in warehouses.

Senator Andrews. But since the reason for their design and the reason for bringing them on is the fact that they are mobile, and in fact MX stands for mobile experimental, doesn't it?

Dr. DeLauer. No.

Senator Andrews. What does MX stand for?

Dr. DeLauer. It doesn't really stand for any specific words. That suffix "X" is a jargon we have on occasion attached to new projects.

Senator Andrews. Well, I thought it stood for mobile experimental missile and I thought the mobility was a key part of it because the Russians had targeted our fixed point ones.

Go ahead.

MX MISSILE ACCURACY

Dr. DeLauer. They aren't exactly one to one. There are 10 warheads versus 3. The accuracy of the MX missile is higher. The MX provides an increased capability in a single launcher. We are planning a permanent basing mode recommendation to the Congress by July 1, 1983. We have presented this program as a basis for the best way to transition from production of the missiles first into a temporary interim basing mode which provides a very highly accurate capability and a factor of 3-to-1 increase in reentry vehicles. This we feel is quite an increase in capability that will in turn impose upon the Soviets some consideration in regard to what they intend to do.

This is exactly what I was arguing our strategic program does. It forces a reactive position on the part of the adversary. If we put MX in the warehouse, he has to make no change whatsoever in his posture.

Senator **Andrews**. Well, obviously you are saying if we put them in the warehouse. My own feeling is that until we get a satisfactory method of basing them why do we need them? As I have said so many times, it is like buying a Rolls Royce that you don't have a garage for. It is better we wait and get them run through the assembly lines when we know where they are going.

Or are you telling the subcommittee, Doctor, that in your mind a fixed point silo basing system for the MX is an adequate basing system?

Dr. **DeLauer**. No, I am not telling you that at all.

Senator **Andrews**. So you are saying that in order to make the MX viable you have to find another basing system?

Dr. **DeLauer**. Absolutely.

Senator **Andrews**. Let me ask one final question because I don't want to impinge on my time and this ties in with the MX.

Senator **Stevens**. Your time is up, but go ahead and ask your question.

Senator **Andrews**. Thank you, Mr. Chairman.

COST PERFORMANCE TRADEOFF IN ABM

Has the R. & D. in ballistic missile defense technology progressed to the point where a cost performance tradeoff, cost effectiveness dollar, and centswise can be performed?

Dr. **DeLauer**. We are in a position now with the work done on the antiballistic missile, research, and the technology programs that have been carried out, that we believe by the time we have to make a permanent decision or make a decision for the permanent basing mode, we will have in hand the ability to be able to make that assessment as to its effectiveness versus its cost.

Senator **Andrews**. Do you have a figure now of projected cost on the two-layer BMD system for the currently planned MX basing system for 100 missiles?

Dr. **DeLauer**. We don't have that.

Senator **Andrews**. Will you have that later on when you go into the MX briefing that you say you are going to go into with the committee?

Dr. **DeLauer**. No, because it is not clear that that is going to be the final determination. We will have for you, Senator Andrews, what we intend to spend in the next year and a half for the purpose of looking at what the BMD might do if it is selected as part of the permanent basing mode. We will have that number.

[The information follows:]

BALLISTIC MISSILE DEFENSE FUNDING

The Ballistic Missile Defense program is a broad-based R&D effort to advance our strategic defense capability, validate new technologies and components in a systems context and assure that we can rapidly develop and deploy, if needed, a modern BMD system. By maintaining this effort we also assure that the specialized expertise required to assist in the assessment of intelligence information on Soviet BMD efforts and to evaluate the ability of our offensive forces to penetrate these defenses is available. Our funding for the BMD Advanced Technology Program, which carries out technology and component developments and obtains the needed data base on relevant phenomena and environments, is $126 million fiscal year 1982 and our request for fiscal year 1983 is $143 million. The funding for the BMD Systems Technology Program, which is the program responsible for the design and evaluation of BMD systems, is $336 million in fiscal year 1982 and we have requested $727 million for fiscal year 1983.

The major thrust of the BMD Systems Technology Program today is focused on the development of a defended option for MX. Of the total BMD funding, $246 million in fiscal year 1982 and $663 million of the fiscal year 1983 request will be spent on the development of a low altitude terminal defense. This is our most mature BMD technology but it is essential that we develop and evaluate it. We have not had any system developments in several years and there is a limit to what can be learned without building and testing a complete system. The Soviets have maintained a large scale BMD system program and have brought their available BMD technology much closer to a deployable capability than we currently have. This gives them a significant advantage over the U.S. if they choose to exploit it. The proposed program will eliminate that advantage.

Senator ANDREWS. Thank you, Mr. Chairman. I have some questions I would like to submit for the record, if I might.

Senator STEVENS. I will state we are going to have an MX hearing, solely on MX.

Senator ANDREWS. I have got a lot more on MX, too, and I will wait for that hearing, Mr. Chairman.

Senator STEVENS. I understand.

Senator McClure.

Senator McCLURE. Thank you, Mr. Chairman.

NEW POST ON DEVELOPMENT AND SUPPORT

I want to ask one question that is of almost no significance. I am just curious. On page 3 of your statement you refer to a proposed post on development and support which would also serve as the Principal Deputy Under Secretary of Defense for Research and Engineering and you have capitalized "Principal." Have we started another layer of hierarchy?

Dr. DELAUER. No. As you know, for the last two administrations there has always been a Principal Deputy to the Under Secretary. Remember Bob Parker.

Senator McCLURE. It is a kind of a additional post, not new.

Dr. DELAUER. In the last decade, but not for this administration.

Senator McCLURE. I understand that. It is kind of like having a principal Lt. General somewhere.

Dr. DELAUER. Well, not quite. As you know, there are only certain people authorized to approve certain decisions or certain actions as the Secretary or the Deputy Secretary, the Secretaries of the Services, and the Under Secretary. In my case, my Deputy is the one that is permitted to act when I am not there. So that is part of the thing. You will notice in there that I have essentially double hatted them. Not only do I have a Principal Deputy, but he also is responsible for managing the systems and support activity.

Senator McCLURE. I don't want to spend too much time on that. I just wondered if there is any emphasis on that than there has been in the past or any expansion of that into other areas?

Dr. DELAUER. No organizational inflation, no, sir.

PROCUREMENT AND ACQUISITION REQUIREMENTS

Senator McCLURE. On page 6 of your statement, at the bottom of the page, you mention your procurement and acquisition requirements, and you say "Our goal is to reduce manufacturing lead time and to demonstrate preparedness for a conflict of indefinite duration. This requires isolation of production bottlenecks" and so on. What do you mean by "indefinite duration"?

Dr. DELAUER. Well, you know, if you do a balance of capability versus the need, you find that it is very dependent on the length of a possible conflict. What we mean by this particular statement is that in a very short conflict there is almost nothing you can do to get your industrial capability to contribute to that short period of time.

Over an extended period of time you will find that if you do things early you can come up to fulfilling your requirements much quicker. You just get up faster. It is providing what we call a surge capability such that, in the eventuality that we might have a long, undetermined length of conflict, we can get up to that degree of industrial production faster.

Senator McCLURE. So you are looking not at the sustainability of operations, but the surge capacity to get to that level?

Dr. DELAUER. That is what that particular sentence referred to, surge capacity.

DEFENSE STOCKPILE

Senator McCLURE. With respect to the sustainability you also have responsibility over the Defense Production Act activities, the national defense stockpile and the critical raw materials status which you refer to in IV of your more lengthy presentation here today. Can you tell us how you are coming on the defense stockpile?

Dr. DELAUER. Well, as you know, we deal also with part of the national stockpile which is run by the FEMA organization, the Federal Emergency Management Agency. We deal with them primarily by telling them what our requirements are in regard to commodities and things that they buy for the national stockpile.

In our own defensive area it is primarily peculiar items that could indeed by very critical to us in case of an emergency.

Senator McCLURE. Well, don't you also give them information with respect to the not peculiar items such as steel?

Dr. DELAUER. That is right, we do.

Senator McCLURE. And aluminum?

Dr. DELAUER. That is right, and titanium and cobalt. Right now we are in the process of trying to use the Defense Production Act to open up a couple of dormant cobalt mining operations by providing them essentially a predetermined contract to buy their output at a particular price.

Senator McClure. How are you doing on that?

Dr. DeLauer. We are doing pretty well. We are down to the final stages as far as negotiating.

Senator McClure. You mean you are getting close to making a decision?

Dr. DeLauer. Close to making a deal.

Senator McClure. A deal?

Dr. DeLauer. Yes.

Senator McClure. Well, I am sure the Noranda Mining Co. will be glad to know that because they have been asking me if you are making any progress.

Dr. DeLauer. Well, we are making some progress. It all takes money and we have got to work it out.

BLACKBIRD MINE

Senator McClure. Well, the people of Idaho would be very interested in that, too, because that is where the mine is located and that is where the processing would be.

Dr. DeLauer. The Blackbird Mine, it that the one you are talking about?

Senator McClure. Yes, sir.

Dr. DeLauer. The problem with the Blackbird Mine isn't in the fact we couldn't make a deal as far as price is concerned because they are pretty good. The problem is to get into it because of the wilderness area.

Senator McClure. That is no problem, Doctor.

Dr. DeLauer. You have got that solved?

Senator McClure. That is no problem, Doctor.

Dr. DeLauer. All right, fine.

Senator McClure. The Blackbird Mine is not in the wilderness as a matter of fact.

Dr. DeLauer. Don't you have to traverse——

Senator McClure. Not at all.

Dr. DeLauer. Not at all?

Senator McClure. That bothers me a little because I had hoped you knew more about it than that, but it tells me where we are. [Laughter.]

Dr. DeLauer. How do we get around that? Did they change the definition of the wilderness?

SALEM BREAKS WILDERNESS AREA

Senator McClure. We, a year ago, enacted a special statute on the Salem Breaks Wilderness Area which is the central Idaho wilderness area today in which that portion of the cobalt that is outside the Blackbird Mine, but within the boundaries of the wilderness area. We have a wilderness area in which mining is the dominant use, and you know what kind of a bastard child that is.

Dr. DeLauer. You are not going to get me in that kind of a discussion. I have enough trouble with the Defense Department. [Laughter.]

FEMA CONSIDERATION OF DEFENSE PROBLEMS

Senator McClure. This is a problem, but I want to focus not just on the cobalt question. I am very much concerned that FEMA is not really looking at defense requirement over any period of time. When I asked the question about what you meant by indefinite time, I was dealing with that question in particular.

As I recall, the planning requirements are for 3-year sustainability, and 3-year sustainability in a manufacturing context of manufacturing for a long-term war, which includes conventional as well as strategic, would certainly indicate massive requirement of basic raw materials.

The United States is today an island nation in a very real sense dependent upon imported supplies. Many of those imported supplies come from all over the world. They don't just come from the United States, Canada, and Mexico, our adjacent friends, but they come from South Central Africa, as an example, and we have some foreign policy questions as well as security questions dealing with the availability of those supplies.

But it doesn't seem to me that FEMA is taking a very real look at what the level of requirement would be over a 3-year period to sustain most civilian and military production during a period of rapid buildup and armed conflict.

I look at the Stockpile Act and I get discouraged, because if we had never changed the stockpile goals from the initial stockpile goals established 13 years ago, we would be closer to our current assessment than if we hadn't changed it a dozen times in the meantime. The FEMA goals are managed for political and economic reasons and not security reasons.

I notice you nodding your head and I don't want to cause you any difficulty downtown, but I have to get that in the record that you did nod your head because that is a problem for us and it isn't just something like cobalt that happens to be in my State that causes me that concern. Most of the other materials are not.

I notice we have now a mandate, which Congress stopped to sell silver from the national stockpile and not from the Treasury stocks but from the strategic stockpile. We haven't yet stopped using silver for photographic purposes and for industrial purposes, and as we go into more of the high tech we get more and more of the electronics and more and more of the electronics are based upon silver circuitry and contacts because they are dependable and because they work.

I just wonder, Doctor, if we don't need to be concerned not only about high tech and weapons systems, but about the basic materials that go into those technologies and into those production lines?

Senator Stevens. Doctor, that is going to have to be your last answer to Senator McClure.

Dr. DeLauer. I am in violent agreement with you, Senator McClure. Speaking of the Defense Science Board, I chaired a 1977 Defense Science Board summer study on the whole question of preparedness and surge capability. You will find that the recommendations on the report I signed are almost word for word what you are saying.

Senator McClure. It is not nearly as romantic and it is not nearly as gripping as a story of the use of space for war and the development of laser technology or the development of esoteric electronic equipment, but it is absolutely fundamental to our capacity. It doesn't make any news and it doesn't get any high profile. The only reason I have taken the time this morning is that almost all we talk about will be everything else, none of which is attainable if we don't have basic resources.

Dr. DeLauer. The Secretary has put in the Defense Guidance the fact that critical materials is a security issue, just as we put into the Defense Guidance that the energy question is a security issue. We said those two are not only economic issues, but they are security issues as well. Once you get them in there, then you can start doing something about implementing programs that will support them.

Senator Stevens. Senator Kasten.

Senator Kasten. Thank you, Mr. Chairman.

STATUS OF MX BASING STUDIES

Dr. DeLauer, I know we are going to have an MX hearing, but I want to talk briefly about the current status of MX basing studies. What is the breakdown now of R. & D. spending on air mobile and deep underground basing?

Dr. DeLauer. Senator Kasten, I will let T. K. give you the details on that. That is his job.

Mr. Jones. I will have to look that one up.

Senator Kasten. Just a rough breakdown.

Dr. DeLauer. You say the deep underground and the continuous patrol aircraft?

Senator Kasten. Let me ask my whole que[illegible]n while T. K. is looking. I understand that a new basing concept has been added. I have heard reference to both a modular array basing and a deceptive dense pack. I am not clear on what either one of those basing modes are. I want to get a sense of what you are doing on air mobile and deep underground. And I would like an explanation of the other two basing modes I mentioned.

Dr. DeLauer. Let me give you the numbers first and then we will talk about the details. It looks like we will spend about $127 million in fiscal year 1983 on deep basing and $74 million on the CPA if we can get it all broken loose from the authorization/appropriation thing. The defended deceptive basing is $109 million.

Now I will let T. K. talk to you about some of the configuration aspects.

Senator Kasten. You have $109 million for defended deceptive basing. Are modular array basing and deceptive dense pack different forms of that general basing concept?

DEFENDED DECEPTIVE BASING

Dr. DeLauer. That line item is defended deceptive basing. It is essentially the defense portion of the program.

Mr. Jones. What you are referring to, Senator, is some alternative design approaches that we are looking at within the framework of defended deceptive basing. The question on dense pack is whether we can take advantage of hardness to move silos very close together in ways that would complicate the attack and in effect make it an easier job for the defense to break up that attack.

In essence these terms simply refer to different engineering approaches to get the same result.

Senator **Kasten**. Do you expect to reach a basing decision by July 1983?

Mr. **Jones**. Yes, sir, we do.

WEAPONS TESTING

Senator **Kasten**. Dr. DeLauer, it has become a cliche that it takes too long for us to develop and field a new weapons system. Dr. Perry called it a start-stop syndrome. Obviously we want to have a high level of confidence in the systems that we field, but I think that there are more and more of us, in Congress, and I understand that there are more and more people in the Defense Department, concerned about the endless testing of various weapons. Do you see this as a problem?

Dr. **DeLauer**. To answer your question explicitly, yes, it is a problem.

Senator **Kasten**. Don't we have a group of people whose jobs depend upon tests being extended?

Dr. **DeLauer**. You know, part of the problem is that over the years people came in and started making suggestions as to why we have had our problems, not necessarily in the length of the program, but in some of the deficiencies of the program. This whole question of tests was raised about 10 years ago. As a matter of fact, I think when Mr. Packard was in the Deputy's spot. Then, remember, we got the idea that we are going to fly before we buy, and that just lengthened the cycle out. What we did was we flew one thing and built something else. So we are not going to do that.

Then we got into the question whether we had to have independent testing and evaluation. This assumes that the development process can be separated to the point where you build something and then you hand it to somebody else to test, and he gives you some answers and he hands it back to you to fix it, back and forth and back and forth. We don't do that with our successful programs in the nonmilitary area. Our commercial aircraft are not built that way.

You continue to test as you design. As you start to build you continue to evaluate, either by component testing and subsystem testing, or when you can get testing at the systems level. We are restructuring that aspect of operational testing and evaluation in R.D.T. & E. to where the testing organization is part and parcel of the development process. It is not a mail slot operation.

Admiral Linder, Sam Linder, runs that organization for me. We are refocusing our efforts to be sure that the test aspects of any development program are well defined in the beginning. We are requiring the services to come in with a test plan that is a development as well as an operational test plan.

The Deputy Secretary has just signed out a letter to the Services saying that in their development program they have to provide adequate funding for test hardware and test articles and not leave that until later after we have done the design. We are integrating that program.

Senator **Kasten**. To make it more like the private sector?

Dr. **DeLauer**. Absolutely.

SOVIET WEAPONS DEVELOPMENT

Senator **Kasten**. How does the Soviet military system compare in its weapons development cycle?

Dr. **DeLauer**. Well, actually it turns out their weapon development cycle isn't much different than ours. As a matter of fact, from the time we go into full-scale development until the time we come out of full-scale development—whether you call it first flight or first article acceptance or whatever terminology you use—we are all about the same. As a matter of fact, we have been about the same since the Wright Brothers. It runs from 24 to 36 months, depending upon the nature of the program. It is the beginning and the end that is always the problem. We never get into the program and we never quit at the other end of it while we go back and forth. If you would look at the history of most of our programs you will find that they fall into that category.

The Soviets as a rule tend to continue a particular design bureau, updating their equipment generally on a 5-year schedule. If you look at their development program, and we have had some good analysis, almost every other 5 years they will start a new program and the next 5 years they will improve one of the existing ones. Then they will start a new one and they will improve it. They have done that since 1955. The only time that they have varied from that particular cyclical approach was in 1962 with the missile crisis in Cuba. They put a perturbation in there and did some new things. But normally that is their cycle. So we are about the same, but not in the beginning and the end.

STRETCHOUT PROBLEM

Senator **Kasten**. I want to ask a somewhat related question on the stretch-out problem. You said in your testimony that you have cancelled some 60 systems still in the R&D phase. I am sure that some of these decisions were difficult without the benefit of 20/20 hindsight that we now have on systems that have gone through the full development cycle.

I think that this approach is necessary if we are going to avoid the kind of bow-wave effect that, for example, the Army is evidently experiencing right now. Have you been able to develop any general guidelines for when to rethink a development project or when to make priority decisions.

As I understand it, a major problem at the development cycle is that when no decision is made on systems they tend to continue as a result of their own momentum. They hang in there for long periods of time in the development stage, in part because of a lack of money to put them into production. And they build up their own constituency within the Pentagon. Maybe it is, in part, our fault because we continue to fund the program. Or perhaps because we don't force you to make priority recommendations on what programs should be dropped.

Have you developed any guidelines to make sure that this doesn't continue to happen in the future? This relates somewhat to the problem Senator Rudman spoke about earlier.

Dr. DeLauer. I hope I can say yes. We don't have any firm guidelines at the present time. We are trying to arrive at some. Let me give you an example. Since we do indeed now have the planning and the acquisition cycle pretty well tied together through the Defense Resources Board, Research and Engineering has an opportunity along with the Analysis Group to integrate the services' submission of their 5-year plan.

What we are trying to do in that particular area of review as a basis for essentially selecting out things is that if it appears that, within the 5-year plan, the programs have what we would call advanced developments that are not planned to be put into full-scale development and into production in the 5-year plan we are rejecting them and putting them back into the 6.2 category which is exploratory development.

The other thing we are trying to do is within the planning, if there are cross-service programs that are not being supported by one service or the other and have to be in order to be brought up to a level of capability, we are going to have two things we are looking at and are trying to drive at. Either we are going to cancel the program because we don't get full three-service support, or we are going to direct the delinquent organization to reprogram their money into supporting that thing so we can get it all done. Particularly in the command, control and communications area there are quite a few programs like that. JTIDS is a program being run by the Navy for the use of the Army and the Air Force and we have got to get that program on track. We have got some other communications programs that are the same way.

So we are trying to do it in the planning process and do it early to answer your question explicitly.

SITUATION IN ARMY RELATING TO WEAPONS SYSTEMS

Senator Kasten. I just want to ask one related question and then, Mr. Chairman, I know my time is up. Is the Army in worse shape with these kinds of problems than the other services? The Army currently has four systems: the M-1, the AH-64; the Patriot air defense system and the infantry fighting vehicle. All of them have experienced and some have developed cost overruns and major technical problems.

Is it a particular problem in that branch of the service, or is the Army just the one we are going to read about more this year?

Dr. DeLauer. Well, it just so happens that all four of those programs you talked about are just about ready not to be bought in quantity and all of a sudden you are seeing the bill.

Senator Kasten. In big dollars.

Dr. DeLauer. They are big dollars. There is no question about it. This is essentially the heart of the modernization of the Army. A new attack helicopter, a new tank, a new air defense system, and an infantry fighting vehicle which gives the mobility to go with the tank. That is the Army's modernization program. You know, they don't have much else.

Senator **Kasten**. But my understanding is that some of these were initiated in 1962, 1963, and 1964 and here we are just beginning procurement in 1982.

Dr. **DeLauer**. As a matter or fact, I can remember when the source selection was made on Patriot, only it wasn't called Patriot at that time.

Senator **Kasten**. So you are saying that the Army does have a particularly difficult time vis-a-vis the other services?

Dr. **DeLauer**. That is right, they do. Part of it has to do with the fact that they have taken so long in the front end. They have had some problems, but they are fixing them. Now it is the big bills that are coming in. That is why we are having some real problems.

Senator **Kasten**. The bills wouldn't be this size if there weren't all these delays.

Dr. **DeLauer**. We should have phased that modernization program over a decade instead of now all of the sudden having them all on us at one time.

Senator **Kasten**. Mr. Chairman, I have got some additional questions and I would be happy to submit them for the record, if we don't have time for another round of questioning.

REAL GROWTH

Senator **Stevens**. We will go through another series. I have a few questions I want to ask about growth and reduction that I am certain the doctor is anticipating.

Dr. DeLauer, your budget shows real growth above inflation of more than 14 percent or $3.1 billion. Procurement accounts show real growth of more than 20 percent or $19.8 billion. Those two accounts take up $22.9 billion of $30 billion real growth in the whole budget.

Again let me say that; $22.9 billion out of the $30 billion of real growth in the whole 1983 budget is in your area.

Since more than 70 percent of the real growth of this budget is in the acquisition accounts, why shouldn't we look to those accounts for this money that all my colleagues tell me I have got to cut out of this budget this year?

Dr. **DeLauer**. While those are very large dollars, they still represent, as I pointed out before, about a third of the total defense budget. Over half the budget is in personnel cost. The other part is in readiness, buying more of the things to be ready. The part that you are seeing here, the R.D.T. & E. and the production money is the force modernization cost.

Our forces are inadequate. They are not only inadequate in numbers, but they are inadequate in quality. The whole question of force modernization is one that has to be addressed. It has been addressed by us. The question of piecemeal reductions without really taking a look at what it means, particularly in these accounts, I think would be wrong.

One of the major problems we have this year, as you know, is that we have a requirement in the front end both for TOA as well as outlays that has to do with going into multiyear procurement. Under the full funding provision, this calls for a higher level of authorization in order to handle the possibility of cancellations which have a very low probability of happening in a multiyear program. Also, in multiyear programs there are additional outlays in the first year or so as we get the better efficiency out of the system. Then, two, we have economical buys. In most cases economical buys mean higher rate buys. That pushes the funding up nearer the front.

These two things, which are positive initiatives for long-term savings, are showing up in the first year of the budget. If people say it looks like there ought to be some economies that should be able to be made by cutting some of these requests, the first thing we will have to do is we will have to do away with the multiyear procurement and I think that would be a big mistake. We have been fighting for it for almost a decade.

Senator **Stevens**. Well, that is one thing this committee can't work on now is the multiple year. That has to be in the authorization bill.

Dr. **DeLauer**. But they are in. They have supported that. Now what this committee has to do is provide the money to be able to go implement that multiyear. If, indeed, we do not have the funds for multiyear, even though they are authorized, we probably can't go ahead and do them.

CANCELED R.D.T. & E. PROGRAMS

Senator **Stevens**. We share your goal on those. Now you have canceled some 60 R.D.T. & E programs, but you have a bunch of new starts.

Dr. **DeLauer**. We have got some new starts. Overall, I am sorry to say, we have not been able to cut the number down. We have just kept them about even.

Senator **Stevens**. Well, why don't you give us a list of those programs that were canceled or were not funded during the 1982 appropriation which you have put back in this year.

Dr. **DeLauer**. I have got those, too. I don't have too many of those, but we have got some.

Senator **Stevens**. Well, there are a number of programs that were not funded or canceled because of congressional pressure such as SOTAS, JP-233 and IMAWWS. Don't you have a successor to SOTAS in this now? What do they call it, BDS?

Dr. **DeLauer**. BDS?

BATTLEFIELD DATA SYSTEMS

Senator **Stevens**. Battlefield Data Systems. Isn't that the SOTAS successor?

General **Molinelli**. Sir, if I many address that. We have a task force underway that is looking at the technology and we have identified four or five different radars which were in competition among the services, but not enough competition because they all survived. Our intention is to come out of that task force at the end of this week or next week and recommend the elimination of several of these developing radars. We will then apply the one or two surviving radars into the Air Force's Pave Mover and a system for the Army to give the Army that same information or the same type of information that would have been provided by SOTAS.

Senator STEVENS. Well, what I am really trying to get at, Doctor, is if we were under so much pressure we had to cancel some of these systems in 1982, how is it you have included them again in 1983? I understood they were canceled and not postponed. You canceled some of them, as a matter of fact.

Dr. DELAUER. You canceled SOTAS and we have no money in 1982 for SOTAS.

Senator STEVENS. But you have another one, this Battlefield Data System, which I am told is the same thing with just a new name.

Dr. DELAUER. The Battlefield Data System right now is a program being defined. Now, what platform we are going to use, how it is going to tie in with the PLSS and with the Pave Mover, and how you are going to target with it—all of this is being studied. There are no contracts out to start that program until we know what it is. When we do you will certainly know what we are trying to do.

NAVY CANCELLATIONS

Senator STEVENS. Well, I am a little confused. My staff tells me of the 60 programs that were canceled by your office in February that 51 of them are Navy, 1 was Army, and 8 were Air Force. Was that because the Navy didn't have good enough advocates or are they overloaded? Why was it so many of the Navy's programs were eliminated?

Dr. DELAUER. Let me try to get those explicitly and then I will be able to tell you why they might be in general. Here are the Navy ones. There were one'sies and two'sies. Your staff will probably tell you that, all told, all 52 of the Navy's programs for 1983 add up to about $700 million, where the Air Force's seven programs add up to almost $400 million. The are just bigger in number.

The Navy's biggest cancellation is in the aircraft procurement, F-4 aircraft mods, helicopter mods, S-3 mods, and P-3 mods. They have just put off modernization of their aircraft programs until a later time. The rest of the programs are primarily small tactical systems. I can give you examples of them. There are some infrared countermeasures totaling $3 million.

[The information follows:]

TOA $ Millions Saved

February 8, 1982

Code	I. ACQUISITION INITIATIVES	Appn.	FY 1981	FY 1982	FY 1983	FY 1984	FY1985	FY 1986	FY 1987	Total
(AP)	F. Economic Production Rates									
	1. AIM-9M Production	MPAF	24.7	19.2	-22.4	16.7	18.2	17.8	-	74.2
	2. E-3A Procurement	APAF	-	78.0	81.0	-	-	-	-	159.0
	3. Accelerate F-15 Buy	APAF	-	30.0	12.6	-	-	-	-	42.6
	4. RF-4 IR Sensor	APAF	-	-	4.6	8.5	-	-	-	13.1
	5. Defense Satellite Program Acquisition	MPAF	-	-	32.0	32.0	-	-	-	64.0
	6. AN/SSQ-47 Sonobuoy	OPN	-			3.2	-	-	-	3.2
	7. AN/BQQ-5	OPN	-	-	-	1.3	-	-	-	1.3
	8. TSEC/KG-45	OPN	-	-	-	-	.1	.3	.4	.8
	9. SH-60B	APN	-	-	-	-	-	26.7	-	26.7
	10. CH-53E	APN	-	-	5.0	5.0	-	-	-	10.0
	11. Common ECM Equipment	APN	-	-	-	-	-	18.5	-	18.5
	12. Aircraft Production Rates	APN	-	281.6	86.2	-	-	-	-	367.8
	13. F-16 Buy Acceleration	APAF	-	-	199.0	197.0	159.0	192.0	-	747.0
	14. Laser Hellfire	MPA	-	11.2	44.3	62.1	39.1	33.1	-	189.8
	15. Fighting Vehicle Systems	WTCV	4.5	40.4	99.9	73.6	17.6	-	-	236.0
	16. DIVAD Gun	WTCV	-	9.7	25.9	42.7	64.0	170.8	-	313.1
	Subtotal		29.2	470.1	568.1	442.1	398.0	459.2	.4	2,267.1

Code	I. ACQUISITION INITIATIVES	Appn.	FY 1981	FY 1982	FY 1983	FY 1984	FY1985	FY 1986	FY 1987	Total
(AX)	G. Elimination/Reduction of Marginal Programs/Systems									
	1. E-4B Procurement	APAF	-	-	278.7	290.8	-	-	-	569.5
	2. EC-135 Airborne Launch Control Systems	APAF	-	10.4	22.8	-	-	-	-	33.2
	3. Titan Missile Phase Out	MPAF	-	31.1	30.1	23.4	21.3	32.7	-	138.6
	4. KC-135	APAF	-	-	-	28.9	68.5	69.6	-	167.0
		RDTEAF	-	-	10.3	15.8	7.8	.9	-	34.8
	5. B-52 Aircraft Modification	APAF	-	-	.1	21.0	45.3	132.5	-	198.9
		RDTEAF	-	-	7.0	15.9	.1	-	-	23.0
		OMAF	-	-	-	.1	1.9	9.4	-	11.4
		MPAF	-	-	-	-1.0	-1.4	-.3	-	-2.7
	6. Minuteman II	PPAF	-	-	-	-	166.0	212.0	-	378.0
	7. Expendable Drones	RDTEAF	-	-	5.1	8.5	6.8	4.3	-	24.7
		MPAF	-	-	26.7	58.1	52.2	86.7	-	223.7
		MCAF	-	-	.2	.1	-	-	-	.3
		OMAF	-	-	.1	.1	.2	.2	-	.6
		MPAF	-	-	.8	.8	.8	.8	-	3.2
	8. Laser Acquisition	OPAF	-	6.6	-	-	-	-	-	6.6
	9. 8" Anti-Radiation Projectile	RDTEA	-	13.0	13.0	19.0	17.0	33.0	41.0	136.0
	10. AN/SPS-52 Radar	OPN	-	-	14.6	15.9	14.2	12.9	13.5	71.1
	11. CHANNEL FINDER	OPN	-	-	-	7.9	7.8	7.7	8.1	31.5
	12. Gun Fire Control Systems	OPN	-	-	24.1	20.3	-	10.5	-	54.9
	13. SMS ORDALTS: TARTER	OPN	-	-	42.6	60.0	26.0	57.9	49.4	235.9
	14. 5" GP	OPN	-	16.5	29.8	86.8	112.8	112.6	158.2	516.7
	15. Advanced Base Function Components	OPN	-	-	10.0	15.0	48.0	41.0	54.0	168.0
	16. Ship Systems Modifications	OPN	-	-	100.6	159.0	-	17.8	164.6	442.0
	17. NUSS	RDTEN	10.7	46.1	87.9	115.7	105.7	74.2	-	440.3

Code	I. ACQUISITION INITIATIVES	Appn.	FY 1981	FY 1982	FY 1983	FY 1984	FY1985	FY 1986	FY 1987	Total
(AX)	G. Elimination/Reduction of Marginal Programs/Systems (Con't)									
	18. Weaponizing Proto	RDTEN	-	2.0	3.0	4.0	6.6	8.2	-	23.8
	19. SOJS (THOR)	RDTEN	-	10.1	22.3	35.6	61.0	76.3	80.5	285.8
	20. CAML	RDTEN	1.7	5.7	5.7	6.7	5.6	.3	.3	26.0
	21. Super Torch	RDTEN	-	3.2	3.2	3.5	3.6	3.6	3.5	20.6
	22. VCX	RDTEN	-	32.6	-	-	-	-	-	32.6
	23. TEWDS	RDTEN	-	8.8	6.9	19.8	24.4	29.5	31.2	120.6
	24. MADAIR	RDTEN	-	2.3	3.7	4.0	4.1	4.1	4.3	22.5
	25. Buried Manhunt	RDTEN	-	1.8	5.0	6.6	6.4	7.9	8.3	36.0
	26. IIR Harpoon	RDTEN	-	38.6	39.8	32.1	23.1	3.6	3.8	141.0
	27. HY 130 Steel	RDTEN	-	-	1.8	-	-	-	-	1.8
	28. MDM	RDTEN	-	.7	38.0	46.0	42.0	38.0	35.0	199.7
	29. RECO	RDTEN	-	-	1.2	3.5	5.9	6.0	5.9	22.5
	30. EMCARD	RDTEN	-	2.4	2.8	3.1	2.7	2.7	2.8	16.5
	31. Mobile Trk Range	RDTEN	-	6.5	4.1	-	-	-	-	10.6
	32. DASS	RDTEN	-	-	3.7	1.4	1.3	.6	.6	7.6
	33. RFX	RDTEN	-	-	17.0	19.0	36.1	35.8	37.8	145.7
	34. Dual Mini Sins	RDTEN	-	1.0	.5	-	-	-	-	1.5
	35. A-6/AWSACS	RDTEN	-	-	22.4	56.1	37.7	8.9	-	125.1
	36. Linear Chair	RDTEN	-	4.0	1.4	-	-	-	-	5.4
	37. VLS ASROC	RDTEN	-	15.3	27.6	20.4	12.7	.5	.5	77.0
	38. AEPS II	RDTEN	-	-	2.7	3.2	3.3	3.6	3.8	16.6
	39. SEAFIRE	RDTEN	-	1.8	17.0	17.5	16.5	7.0	7.3	67.1
	40. FIREBRAND	RDTEN	-	-	23.7	35.0	28.7	20.5	8.9	116.8
	41. CH-46 Ext Tank	RDTEN	-	-	1.2	-	-	-	-	1.2
	42. PCOTES	RDTEN	-	5.0	5.0	-	-	-	-	10.0
	43. LINEAR ECM	RDTEN	-	-	7.9	3.7	3.1	-	-	14.7
	44. Navy Future Comm	RDTEN	-	2.7	5.0	5.9	6.2	6.9	7.2	33.9
	45. SXTF Closed	RDTEDA	-	18.1	22.6	14.2	5.7	5.5	-	66.1
	46. Navy OSHA	MCN	-	-	11.0	14.0	13.8	6.0	6.0	50.8
		OPN	-	3.5	3.0	3.0	3.0	3.0	3.0	18.5
		OMN	-	2.5	3.0	3.0	3.0	3.0	3.0	17.5

Code	I. ACQUISITION INITIATIVES	Appn.	FY 1981	FY 1982	FY 1983	FY 1984	FY1985	FY 1986	FY 1987	Total
(AX)	G. Elimination/Reduction of Marginal Programs/Systems (Con't)									
	47. H-46 Emergency Egress Mod	APN	-	-	1.7	1.9	.9	.1	-	4.6
	48. H-46 AAR Mod	APN	-	-	1.4	3.6	5.8	11.0	.5	22.3
	49. H-46 Ground Prox Modification	APN	-	-	-	5.6	5.8	3.6	-	15.0
	50. S-3 Ejection Seat Modification	APN	-	-	-	-	2.1	2.1	1.9	6.1
	51. S-3 IFR Probe Modification	APN	-	-	1.7	1.7	-	-	-	3.4
	52. S-3 TACAN EXCAP Modification	APN	-	-	1.2	2.2	1.1	1.1	-	5.6
	53. P-3 TACNAV Mod	APN	-	-	30.9	22.1	5.3	.3	-	58.6
	54. 25 mm Gun Pod Mod	APN	-	-	-	8.9	33.6	64.6	-	107.1
	55. ECM(ALR-45) Mod	APN	-	-	36.3	36.8	-	-	-	73.1
	56. H-46 Fuel Tanks Modification	APN	-	-	-	-	6.9	7.3	.8	15.0
	57. F-4, APR-43 Modification	APN	-	-	4.8	6.0	1.1	.6	-	12.5
	58. F-4, APR-118 Modification	APN	-	-	3.5	2.4	.8	.4	-	7.1
	59. A-6 (AWSACS)	APN	-	-	-	-	4.9	107.7	101.7	214.3
	60. P-3C(Multi-Signal/ BITE)	APN	-	-	5.7	5.6	4.9	3.9	-	20.1
	Subtotal		12.4	292.3	1,103.9	1,420.2	1,130.7	1,400.6	847.4	6,207.5

IMPACT ON PROGRAM FROM R. & D. REDUCTION

Senator **Stevens**. Let me interrupt you because my colleagues have some questions.

So last year we reduced your R. & D. account by about a half a billion dollars. What impact has it had on your program? Have you suffered? Is there something that you haven't been able to do that you really had to do?

Dr. **DeLauer**. I don't think so, but I can't tell you that for sure until we really find out. I will provide that for the record.

[The information follows:]

Reduction in R. & D. Request

The Appropriations Conferees cut our R. & D. request by about $460 million in fiscal year 1982. Of the total Army reduction of $159 million, the major items were SOTAS (−$70 million), NAVSTAR user equipment (−$21 million), DARCOM ranges (−$11 million), BMD technology (−$17 million), and Advanced Multipurpose Armed System (−$13 million). Of the total Navy net reduction of $41 million, the major items were F-18 (−$35 million) and a classified program (−$45 million) partially offset by some conference adds. Of the total Air Force reduction of $164 million, the major item was the C-X program (−$170 million). Defense Agencies were reduced by $96 million, primarily for a DARPA project (−$52 million) and a classified program (−$34 million). We have been able to accommodate these reductions by seeking other solutions to our force requirements but our overall level of R. & D. is not as high as it should be if we are to compete satisfactorily with an adversary that is spending high annual amounts on R. & D. in order to gain the upper hand in weapon sophistication. Thus, we would hope that this committee does not use a "target amount" for judging our fiscal year 1983 R. & D. needs but rather will make only those adjustments that do not enhance our military capabilities.

TARGET LEVEL FOR BUDGET CUTS

Senator **Stevens**. Now we are soon to be assigned a target level for cutting the budget and this subcommittee is going to have the brunt of it in case you haven't heard.

Dr. **DeLauer**. The rumor is out. [Laughter.]

Senator **Stevens**. We have a nice battle going on. But let's just assume the committee does decide that we have to take off somewhere around $9 to $10 billion. Now where in the R. & D. spending would we be able to make reductions of that magnitude? You have about 9 or 10 percent of the total budget. If we had to take off $10 billion, we are going to have to take about a billion dollars off your area. Where could that happen?

Dr. **DeLauer**. Mr. Chairman, I can't answer that today. My view is that I wouldn't look at R. & D. first. I would look at force structure first.

Senator **Stevens**. Well, if we looked in terms of real growth areas, you have 70 percent of the real growth. So that as a practical matter we are going to look at your area first.

Dr. **DeLauer**. But I don't think you ought to look only at the growth. You ought to consider why the growth exists. The growth exists for the following two purposes.

In the R.D.T. & E. account it is essentially trying to go after the future and trying to get those things out of exploratory development into full-scale development. The growth in the procurement account has to do with force modernization. We are buying things for force modernization.

NEW STARTS IN CURRENT BUDGET

Senator **Stevens**. What about these new starts you put in there this year?

Dr. **DeLauer**. New starts?

Senator **Stevens**. The ones we intentionally took out last year that you put back in this year and total new programs, too. You know, if we had a system that would do it, and we really were your board of directors I would give you the money and tell you to save a billion and a half dollars, Doctor, and I think you would do it. But now we can't work that way, unfortunately.

Dr. **DeLauer**. I know you can't.

Senator **Stevens**. We have the budget ceilings so we have to find some way to find those soft spots between the two of us so that if we do take reductions they will be in the places where we can take them without damaging the program. Now how are we going to do that?

Dr. **DeLauer**. Mr. Chairman, I think that has to be done in consultation with the Defense Department, with the Secretary. I am not here to dismantle the R.D.T. & E. or procurement accounts. I am here to defend them.

Senator **Stevens**. Well, can you set up a priority on the new starts?

Dr. **DeLauer**. We probably could if we had to; yes, sir. We tried to. As a matter of fact, it is kind of hard after you cut one point. Let me tell you how many new starts we denied.

Senator **Stevens**. Sixty.

Dr. **DeLauer**. $1.6 billion of new starts, and this is in the 1983 to 1987 POM period. We have canceled these new starts to begin with. So we have done some prioritizing. I think if we had to prioritize by areas, there is no question the strategic program has to be high, readiness has to be high, force modernization has to high, and I think force structure is something else.

Senator **Stevens**. All right. Well, I am going to start something here and I am going to ask my colleagues who want to join me, but we are going to start coming over and visiting you on Friday morning.

Dr. **DeLauer**. I would love to have you. Are you going to come for breakfast?

Senator **Stevens**. I would like to but I can't get these guys started that early I don't think. [Laughter.]

Senator **Rudman**. Mr. Chairman, that is not fair.

Senator **Stevens**. Some of them, yes. [Laughter.]

I would like to sort of have a feet-up opportunity with you to just look at this.

Dr. **DeLauer**. So would I.

Senator **Stevens**. This is coming and we might as well do it the right way and I would like to have maximum participation in that.

Dr. **DeLauer**. I would like very much to sit down and talk to you about it.

Senator **Stevens**. My time is up.

Senator Rudman.

Senator **Rudman**. Thank you, Mr. Chairman.

I think a 7 o'clock breakfast meeting at the Pentagon would get off to a good start, Dr. DeLauer. If we can round some people up it would be a good idea.

Dr. **DeLauer**. I am ready. You would be surprised how quiet it is at that time.

Senator **Stevens**. I was in Cleveland at 7 o'clock this morning. I don't think I would make it.

CUTS IN NEW WEAPONS SYSTEMS

Senator **Rudman**. I want to follow up on what I started to talk to you about earlier, because as I look at your list of new starts I wonder whether lurking within that area are the future M-1's and Apache helicopters and infantry fighting vehicles which are coming in at costs which certainly must be as shocking to you as they are to us.

Senator Kasten got into this line of questioning with you and it is the one that I really started earlier. If you haven't started doing it, what are you planning to do to at least have the ability to start cutting these programs early in their life cycle?

I doubt very seriously that if 4 years you had looked at a helicopter that cost $16 million that you would have gone ahead and continued to build it. I think you would have done something else.

You are the key to it in your shop because once it gets beyond a certain point we can see the stonewalling on the part of those people who come up here and say, well, at this point we have no choice and we must go ahead, and in many cases they are right, they don't have a choice, no matter what the costs. We almost have to buy it.

What are you doing to address that problem in a major way, because to me that is the key to not having these future financial catastrophies, which is what we are really facing with some of these acquisitions today?

Dr. **DeLauer**. We are doing a few things and the budget reflects it. We are attempting to have budgeting at the most probable cost and not at somebody's wish list cost. I think the Secretary said one of the main elements of the program is we are really budgeting at the most probable cost and not some artificial rate, particularly on future estimates of cost.

ELIMINATION OF DUPLICATE PROGRAMS

My effort is toward elimination of duplicate programs. My effort is toward integration of the particular mission responsibilities. You see, it doesn't make sense to me, for instance—and we are working on it—to put a pilot in an F-16, to put pods on the airplane and to send in these kids with perhaps in some cases a standoff missile, even though we canceled the JP-233, thank God, to go after an airfield. Now that airfield is the threat. It is a geographical position. It doesn't move around. It is not mobile so you don't need a manned platform to go after it. There is no reason in the world why that can't be a mission for other forms of capability, such as a conventional Pershing, not a nuclear Pershing but a conventional Pershing.

Herein lies the problem. One is the Army's responsibility and the other is the Air Force's responsibility. Now the further away you get from the battlefield apparently the more important that issue is. When you get right up there close and talk to the people out in the field, and I have talked to General Gabriel about this issue, he says, I could care less who gets that airfield out of there as long as they get it out of there for me.

MISSION ASSIGNMENTS

Senator **RUDMAN**. Of course, that really is the essence of what General Jones has been saying about the whole institution of the Joint Chiefs, and that is that we in fact do have a number of mission assignments contained within both our strategic and our conventional plans which in many cases are not relevant to each other and in many cases are not the best use of assets and so we end up buying two instead of one.

Dr. **DELAUER**. That is right. You can talk programs and you can talk why did you start this one and why did you cancel that one, but until we have focused on the way we are going to handle the threat in a coherent and an integrated fashion we are not going to save very much money.

Senator **RUDMAN**. Well, when are we going to start that focus?

Dr. **DELAUER**. We are doing that right now. That is what I said in my opening statement. As far as the tactical forces are concerned, that is our No. 1 job right now.

ALTERNATIVE SYSTEMS

Senator **RUDMAN**. Just one last very quick question. You spoke about the four major advances that the Army was now bringing on line. At this point what serious consideration within your shop, or maybe that is not in your shop, is being given to alternatives to going to the full procurement for these particular systems? There are alternatives to buying all those M-1's? The alternative would be to put the modification kit on the M-60A1's and make them A-3's. They have the same gun as the M-1 tank and the same firing system. It is not as mobile but may be more reliable and you would have a lot more tanks in the field a lot quicker than the 30 a month we are now producing. Do you get into that at all?

Dr. **DELAUER**. We do to a degree.

Senator **RUDMAN**. Are those alternatives being examined at this time?

Dr. **DELAUER**. In the particular suggestion you make about the M-60 and M-1, I think that has been examined in the past and they have come down on the M-1.

Senator **RUDMAN**. Oh, I understand why, but I am not sure that is the right decision.

Dr. **DELAUER**. Let me give you a little piece of current data. Deputy Secretary Carlucci just came back from Europe. He went out and rode in the M-1 and his view was I wish everybody that has complained about the M-1 would go out there and rule in it and talk to the people that are fighting in it and talk to the kids that are running it and ask how they feel about it. He says it is an outstanding piece of machinery.

Senator **Rudman**. Dr. DeLauer, I spent a day at Fort Hood with Senator Stevens and we did both. I just want to conclude my time by simply saying to you that everything you say is true, but if the balloon went up a week from Tuesday I would rather have 700 M-60A3's with that gun and that firing system which is identical than 60 M-1's which is about what we are talking about right now. I am simply submitting to you that maybe we ought to consider more conversions at this time with a faster deployment and less money.

Obviously, if I were Commanding General of the Army I would love to have nothing but M-1's, but I don't think that is the alternative that we are facing but that is the one you are choosing and I wish you would take another look at it because there are some moneys to be saved and there are some capital advantages to be gained at least in the short run.

I think my time is up.

Dr. **DeLauer**. Do you want to add something?

M-60 TANK CONVERSION

General **Molinelli**. Yes, sir. I would like to respond to your question or your thesis on the M-60A3 and say that the Army agrees with you, and that is programed to convert the M-60's to the M-60A3's. I have a thing on the tank fleet. The Army absolutely agrees with you. The M-60A3 in great numbers is preferable to a very small number of M-1's. They go out through the year 1990 and beyond that, the conversion of the M-60 fleet.

Senator **Rudman**. I am glad to hear that, General. I have been trying to get someone to say that now for about 7 months and somebody has finally said it.

Dr. **DeLauer**. You see, you never know what is going to happen when you get us over here.

Senator **Rudman**. That is right.

Senator **Stevens**. Well, that is not reflected in this budget, is it?

General **Molinelli**. I am sorry, sir?

Senator **Stevens**. That conversion is not reflected in this budget. The increased M-1 buy is reflected.

Dr. **DeLauer**. Yes, it is. It is almost a straight line.

[The information follows:]

UNCLASSIFIED

M1 ABRAMS TANK

SERVICE: U.S. ARMY

DESCRIPTION:

The M1 is a full-track, very effectively armored, four-man crew battle tank equipped with day/night fully integrated fire control, a 105mm gun (is scheduled to receive a 120mm gun in 1985), one 50-caliber machine gun, and two 7.62 mm machine guns. The Chrysler turbine-powered M1 design was selected in 1976 for full scale development and production after comparative test and evaluation of a competing prototype M1 developed by General Motors and the Leopard 2 prototype tank developed by Krauss Maffei, AG, West Germany.

FEATURES:

Major improvement in ballistic protection greatly increases survivability.

Faster acceleration, higher cross-country speed, and lower profile, makes it a more difficult target.

Increased firepower through improved fire control, stabilization, night vision equipment.

Design emphasis on increased reliability and reduced maintenance.

CONTRACTORS:

Chrysler Corp., Sterling Heights, MI (Prime)

AVCO Lycoming Div., Stratford, CT (turbine engine)

Detroit Diesel Allison Div., General Motors, Detroit, MI (Transmission)

Hughes Aircraft Co., Culver City, CA (Thermal imaging sight and laser rangefinder);

Computing devices of Canada, Ottawa, Ontario (Ballistic computer).

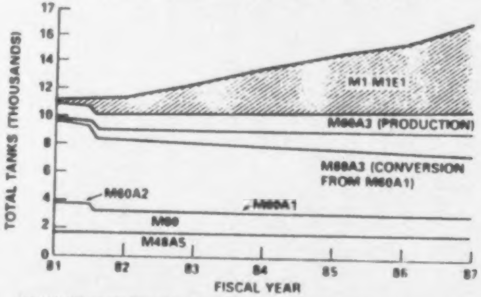
PROGRAM ELEMENTS: 64620A, 64630A, 23735A (330)

CAPABILITY COMPARISON

CAPABILITY	"NEW" M1	"OLD" M48A5	"OLD" M60A1/A3
Weight, U.S. tons	60	54	54.8/56.8
Engine HP	1500 (turbine)	750 (diesel)	750 (diesel)
Road speed, mph	45	30	30
Main gun	105mm (Current) 120mm (Starts 1985)	105 mm	105mm
Armor	Special Armor	conventional	conventional
Night sight	Thermal	No	Thermal (M60A3 only)
Fire on the move	Yes	No	Limited

U.S. ARMY TANK INVENTORY

TOTAL AAO 15106 TANKS
(UNDER REVIEW FOR POM 84-88)
M1/M1E1 INVENTORY OBJECTIVE 7058



M60A2 DROPPED FROM INVENTORY—AWAITING ARMY DECISION TO CONVERT TO AVLB/CEV.

M-60A3 CONVERSION

General **Molinelli**. Yes, sir, that conversion has been ongoing since 1980. The conversion that I am talking about here, this is the M-60A3 line. As you see, the total number of assets of M-60A3's exceeds the M-1's out through about the year 1988, but the A3 goes on out into the 1990's.

Senator **Rudman**. My problem, Mr. Chairman, is that I would like to see maybe at this juncture, since we are now talking about a new model of the M-1, the M-1A, to meet the current Soviet threat because of course the M-1 won't completely in the 1990's, my suggestion has been that maybe we ought to buy a few less M-1's right now, quite a few less.

Senator **Stevens**. I understood that. I misunderstood when I thought you were agreeing with him in his proposal to acquire fewer M-1's and increase the conversion. That is not reflected in the budget.

General **Molinelli**. I am agreeing with him on the modification of the A2, yes, sir.

Senator **Stevens**. Senator Kasten.

TRIDENT SUBMARINE CONSTRUCTION RATE

Senator **Kasten**. Dr. DeLauer, this year the Navy has requested two Trident submarines. Every other year, as I understand it, we have requested only one. You mentioned the urgent need for strategic force modernization and I think the committee supports that requirement. But I would like to know, first of all, if you think Electric Boat Co. is capable of producing two submarines, and, second, what would be the effect of cutting the Trident buy back to one for this year? Would this seriously damage our modernization plans?

Dr. **DeLauer**. Senator Kasten, I really can't answer that. I don't know whether the reason we are asking for two this year is because of the delay in the first part. As a matter of fact, that is one of the advantages of the D-5 program, we finally get down to one a year. Now I don't know whether the two a year this year for the Tridents is because of their delay and we are getting two delivered this year and have to pay for them this year or whether it was scheduled that way. I just can't answer. I will have to get it for the record.

Senator **Kasten**. My understanding is you are ordering two this year, that you are doubling the buy, in other words.

Dr. **DeLauer**. I think it is because we are late. We were late almost, what, 2 years on the *Ohio*. I think that part of it has to do with the fact that we got kind of a bow-wave from this lateness and we are getting two delivered this year. I don't think the original schedule was to do that, but there they are and we have to finish them up.

Senator **Kasten**. Could you get back to us with a specific answer on that question?

Dr. **DeLauer**. Yes. As a matter of fact, in the outyears, which you don't have but which we do in our plans, you will find that in the outyears we have cut back the rate to one Trident each year vice one and one-half per year because of the D-5 program since you don't have to build them as fast to attain our desired capability.

Senator **Kasten**. Well, the two for this year is in the 5-year plan that you have presented to Congress.

Dr. **DeLauer**. Right.

[The information follows:]

Trident Shipbuilding Rate

Construction problems at Electric Boat Division which caused earlier delays in delivery dates and which precipitated Congressional action last year in deferring the ship from the fiscal year 1982 budget have largely been resolved. Electric Boat has both the capacity and capability to support construction of the two fiscal year 1983 *Ohio* class submarines in the President's budget. After deferring the 10th Trident submarine in fiscal year 1982, the 97th Congress added additional advanced procurement funding for the tenth, eleventh, and twelfth Trident submarines to insure that, when the program was ready to go forward, construction could begin without delay. The contract which was awarded for the fiscal year 1981 ship contains firm "fixed price" options for two ships in fiscal year 1983. If only one ship is authorized, a new contract would be required for the deleted ship when it is authorized in fiscal year 1984. The eleventh ship then would be subject to new negotiations on cost and schedule with the impacts of production break being factored in. Cost savings realized by quantity buy at fixed price versus new negotiations is significant. It is estimated that approximately $340 million more would be required to procure the second fiscal year 1983 ship as a single ship in fiscal year 1984. A building rate of one Trident submarine a year is barely adequate for the orderly replacement of our aging force of thirty-one Poseidon and Trident I backfit submarines which will reach a period of block obsolescence in the mid-1990s. Even with introduction of the Trident II missile in late 1989, it is vital that we maintain the procurement rate as contained in the President's Strategic Modernization Package to reduce the current margin of U.S inferiority.

AH-64 PROGRAM STATUS

Senator **Kasten**. What is the status of the AH-64 program? I understand that Hughes was just awarded a $31.9 million contract. The money is for "interim funding while the negotiations on the production cost continue." What is the $31 million for, what is the hangup in the negotiations and how soon do you expect them to be completed? We are asking for 11 of these helicopters this year and plan for a total buy of 466. The cost is astronomical. Are you negotiating with Hughes to lower the cost? Is that the reason for the delay?

Dr. **DeLauer**. I will answer your latter part first and then I will have Bob tell you why we need the $31 million. I believe the $31 million is to keep them from falling into essentially default.

Senator **Kasten**. The decision was supposed to be made in December, first, and now I understand in January.

Dr. **DeLauer**. There is one issue, Senator Kasten. Can we afford it? Jim Ambrose, Under Secretary of the Army, has been handling this personally, and he and I talk on a daily basis on this. In our view, the Hughes helicopter people are asking for a price on the first buy—and those are the first one we are worried about because that sets the stage—we don't think is proper.

Jim Ambrose has been going line item by line item on those costs. He has had discussions with Jack Reel and Bill Lumus to get the costs down. I have had meetings with Bill Lumus and Jack Reel also telling them, look, we are very much concerned and if it gets to the point where it is not affordable we just won't do it.

Senator KASTEN. In response to the last set of questions I asked, you said that you were getting these kinds of problems under control and that we are speeding up this whole process of development and acquisition. Now you are unable to come to a decision which was supposed to have been made several months ago. You have come up with 31 million more dollars in so-called interim funding and still are postponing a decision. It seems clear that you either have got to negotiate harder with Hughes or develop an alternative to this attack helicopter.

Dr. DELAUER. We are doing both.

Senator KASTEN. What is the $31 million for? I know that doesn't sound like much to you but it does to people in the State of Wisconsin, especially when it only keeps a decision open.

Dr. DELAUER. It is a lot.

Bob, can you tell him?

General MOLINELLI. Yes, sir. That is intended to hold our options open with Hughes until April 15.

Senator KASTEN. Why do you need any money to hold your options open with Hughes?

General MOLINELLI. Well, to hold our options open in terms of it cost us just to keep that program going. We have a procurement program planned that is based on a December 1981 production start. To maintain the planned schedule we must do a certain amount of work to transition the program from development to production, especially in long lead time item areas. That is what the $31 million is for.

Senator KASTEN. Hughes is interested in this contract. You are saying that they have to keep certain people employed there for the next month or 6 weeks while you decide whether you are going to buy the helicopter at a certain price. Now if I were in the shoe manufacturing business, as I once was, I would go out and sell our line of fall shoes. I would hope that people would buy them and I would start to plan on ordering materials and whatever, but I wouldn't buy them until I had the order.

Now Hughes had the choice of working with you in December and in January. Why should it be the taxpayers' responsibility to pay for this interim period rather than Hughes?

Dr. DELAUER. Except, Senator, you know, you are not just giving them this money without any consideration. They are delivering equipment. They are testing equipment. They are getting value for what we are providing.

Senator KASTEN. But are we getting anything in return for that?

Dr. DELAUER. Oh, absolutely.

Senator KASTEN. I understand that Hughes is getting something, they are getting $31 million.

Dr. DELAUER. No, no, I misspoke. We are getting value for this. We are keeping the transition program going and we are keeping the development parts that they have going. One of the reasons is that we are having a tough time negotiating. We are supposed to have a DSARC on the 26th, which may be postponed because of the discrepancy between what Hughes has proposed as the cost for that first order of helicopters and what the Army and the Department figure they can afford.

Senator **Kasten**. Dr. LeLauer, I am frustrated about this. Let's assume that we decide we want to have an alternative to this attack helicopter. It seems to me that it is not the taxpayer's responsibility to foot the bill for interim funding. It seems to me that that ought to be the responsibility of Hughes Aircraft Co. if they are interested in this order.

Dr. **DeLauer**. It is not clear that they are interested in this order at the wrong price. That is one of the problems facing us. It is not really clear that they are willing to take a high risk on this program. I have had discussions with Mr. Lumis. Mr. Lumis has got a choice facing him since the whole Hughes financial situation has not been resolved.

He has a judiciary responsibility to all the possible heirs. He is in a position that he wants to be sure that he does not put himself into a place where he can be accused of taking too high a risk with the assets of the estate and as a consequence he is very, very careful and that has been a tough thing to negotiate. It is very tough to negotiate with a guy when he might be marching to a different drummer. So we have to look at alternatives.

Senator **Kasten**. It seems to me, one, that we ought to look at alternatives and, two, that we ought to bring this thing to a conclusion as quickly as possible. In my first set of questions I said these are the kinds of problems we have had in the past. You agreed with me and said you are working things out. Then we look at one, the one that we are looking at right this minute, and clearly it is not worked out. We are coming up with 31 million more dollars just to keep the decision open.

Dr. **DeLauer**. I would like to separate the two things. You do have a point in regard to why haven't we arrived at a conclusion sooner than we have, and that is just two people negotiating. You also have been in the negotiating business, and if you are sitting in a particular negotiation position you can either bring things to a conclusion or you can stretch them out. So that is one thing.

The interim funding was primarily to keep the AH-64 program going. We ran out of our contractual time and if we wanted to have them continue to just work at the present level we had to provide them with additional funding and that is what we have done. They are separate. They are tied together in a program sense, but they are separate issues. You have to negotiate the follow-on contract and get that done. When that is done, then we can decide what we are going to do with the present one.

INTERIM FUNDING

Senator **Kasten**. Let me ask one more question. This interim funding keeps the options or the contract open until, when—the 15th of March?

General **Molinelli**. Fifteenth of April.

Senator **Kasten**. When was the $31 million contract signed? How many days is $31 million buying you?

General **Molinelli**. I would have to research that and tell you.

Senator **Kasten**. Sixty?

General **Molinelli**. About 60 days or less.

Senator **Kasten**. It is hard to understand how $500,000 a day is necessary in order to keep an option open. Do you see what I mean? What are they going to spend the $31 million on?

General **Molinelli**. They are delivering a product, and part of that is the tooling.

Senator **Kasten**. They may deliver a product if we are able to negotiate.

General **Molinelli**. No. The $31 million was previously planned as a part of the transition effort from R. & D. into production. Now we would have liked to have made the production decision earlier but there were issues that have not yet been resolved. We must still do the transition work to maintain our production schedules. We are betting that we will negotiate a satisfactory contract and that we will not have to delay the production program and thus increase the costs even further.

Dr. **DeLauer**. What I have tried to explain is that they are separable contractual actions; $31 million is to keep the R.D.T. & E. program going. Separately, we are negotiating, the production contract for the first 11 production helicopters.

Senator **Kasten**. The 11 are for initial delivery. Ultimately we will buy 466.

Dr. **DeLauer**. That is right, and we are not about to get ourselves into a bad position with those first 11 so that we are really locked in. I am back to Senator Rudman's situation that now we are really locked in. We are working on that problem.

Senator **Kasten**. Mr. Chairman, I think that these are the kinds of things we have to make sure, don't happen again. And, I think we have to ensure our ability in the future to stop projects before they get to this point. Some of these problems are caused by Congress, I am sure, because we have arbitrarily cut back funding.

Dr. **DeLauer**. You are talking about that. What if we just, you know, do the uniform botch and cut it down and back to the thing of buying one-sies and two-sies.

SOVIET SS-20 WEAPON SYSTEM

Senator **Kasten**. Let me ask one final question, Dr. DeLauer. In a recent Armed Forces Journal interview you mentioned that the Soviet SS-20's were one of your primary concerns.

Dr. **DeLauer**. Yes, sir.

Senator **Kasten**. In your opinion, how rapidly could these be converted to intercontinental SS-16's. And related to that, do we have any evidence that the Soviet Union has plans to make that conversion to the SS-16. Do we have reason to believe that they in fact are gearing up right now to do so?

Dr. **DeLauer**. The SS-16's were an existing system in the past; however, no SS-16's were deployed. The SS-16 is the SS-20 with the addition of a third stage. It turns out that the reentry system will go on to that third stage and so it is a question of them being able to install the third stage and essentially have the ICBM capability. I can't remember the number of SS-16's.

Do you remember, T. K.? I thought they were in the order of 1,200.

DEPLOYMENT OF SOVIET SS-16

Mr. JONES. There is some additional information that we could provide you on that. As you know, under the SALT II Treaty the Soviets agreed to forsake deployment of SS-16's.

[The information follows:]

SOVIET SS-16 ICBM

The Soviet Union has had an MRBM/IRBM force for use in a theater/peripheral role since the SRF was first formed in the late 1950's. Today, this role is filled primarily by the SS-20 IRBM that is replacing the older SS-4 MRBM and SS-5 IRBM force. It is very questionable whether the Soviet Union would subvert the theater/peripheral role of the SS-20 in exchange for a very modest gain in total ICBM force capability.

Under the terms of the unratified SALT II Treaty the Soviets agreed not to operationally deploy the SS-16, and available intelligence indicates this to be the case. We have no evidence that the Soviets have made plans for conversion of SS-20's to SS-16's nor would this be considered a necessarily worthwhile option as this would detract from the role of the SS-20.

Although technically possible, the conversion of an SS-20 to an SS-16 would be further complicated by the Soviets agreeing in the unratified SALT II Treaty not to produce the third stage of the SS-16, its reentry vehicle, or the appropriate device for targeting the reentry vehicle of that missile.

Senator KASTEN. I just want to say that I share the concerns you have voiced. It is something we have to get more people thinking about and aware of. We cannot back away from our own strategic force modernization plans. And we should recognize the Soviet build-up for what it is, and their propaganda for what it is.

Thank you, Mr. Chairman.

Senator STEVENS. Thank you.

BUDGET AND GROWTH PROBLEM

Dr. DeLauer, we have got several guidelines here and I want to get back to this budget and growth problem. As you know, we have one proposal from one member of the committee that there be no growth in the defense budget. That, as I understand it, would hold it to at least a $20 billion cut in the defense budget. We have another proposal from the Budget Committee that would permit a 5-percent real growth overall in the whole budget which would mean a $6-plus billion cut.

What I would like to get back to is the question of allocation of this growth to the extent that we are going to permit it.

With this procurement account having $19.8 billion out of the $22.9 billion of the Department, can we look at these in terms of target areas and determine where there would be less harm to the program by maintaining no growth in a particular sector and going to others on a high priority basis? Is that possible? What if we just said no new starts, for instance?

Dr. DELAUER. I can't tell you right now, Mr. Chairman, exactly what that impact would be. I can make that available to you.

[The information follows:]

MAJOR SYSTEM NEW STARTS

This past year during the program review we identified 21 "major system new starts" requested in the Service POM submissions. A major system new start is defined as a program which is projected to cost $200 million or more for RDT&E or $1000 million or more for procurement. These programs require and receive special management attention during preparation of the budget. This year four of these "new starts" were not allowed and two were restructured in a major way. The remaining 16 were fully rationalized and the need for them justified in the program review. If these sixteen programs were cancelled in fiscal year 1983 and beyond, then the reduction in TOA for fiscal year 1983 would be $555 million RDT&E and $159 million for procurement. Over the FYDP the reductions in TOA would be $5727 million and $10633 million for RDT&E and procurement respectively. The associated reduction in outlays for fiscal year 1983 (based on composite DOD outlays rates for RDT&E and procurement) would be $327 million for RDT&E and $20 million for procurement.

Senator STEVENS. Could you? What would it mean in terms of outlays if we said no new starts?

Dr. DELAUER. Probably a small amount.

[The information follows:]

NEW STARTS

It is estimated that the fiscal year 1983 outlays associated with new starts will be $387 million.

OUTLAYS

Senator STEVENS. We are talking about outlays.

Dr. DELAUER. Yes, let's talk about outlays. As you know, there are only two places where you can really save on outlays. That is either in readiness or in force structure, people and things you are running every day.

Senator STEVENS. We are talking about no growth budget concepts.

Dr. DELAUER. I am still saying, do you want to cut outlays?

Senator STEVENS. But you have the growth. The growth is not in those other sectors. Seventy percent of the growth is in the procurement account.

Dr. DELAUER. The R.D.T. & E. is 9.4 percent of the total Department of Defense budget. The procurement account is 34.7 percent of the total. Between them it is less than half of the budget.

Senator STEVENS. But it has 70 percent of the growth in less than half the budget.

Dr. DELAUER. That is right because that is the force modernization that we are talking about. We are talking about force modernization and that, I think, is the program that we ought to just stay right on. No question about it. You will see that 25 percent of the budget is personnel and retired pay and 27 percent of the budget is O. & M. Over half the budget.

Senator STEVENS. You are talking about the percent of the total budget, and I agree. The percentage of the growth though, the real growth, and we are hitting this question coming out from the Budget Committee of what should be the level of growth. Now if you really look at the level of growth and we are told to cut that back we will basically be cutting that half of the budget you are talking about.

Dr. DELAUER. That is right. If you took $5 billion out of R.D.T. &-E. that would take about 25 percent of the R.D.T. & E. budget out. I think that would be crippling.

Senator STEVENS. Well, if you took all of the growth in the R.D.T. & E. budget you would only take out $3.1 billion. what I am saying is that if the goal is $20 billion, that is only $3.1 billion of the goal.

Dr. **DeLauer**. It decimates the R.D.T. & E. budget. There is no question about it. That is just not the way to do it, in my view. That is, not to go and do a uniform botch.

HEARING PROCEDURE

Senator **Stevens**. Let me just state for you and the other witnesses that we are going to change our hearing pattern. I assume you have heard it this year. We are going to have a hearing on the M-X program, a separate one on airlift requirements, a separate one on the M-1 and the tank problem that Senator Rudman discussed. We would like to have a separate one, and maybe it will be a second portion of that airlift requirement in terms of helicopters. We want a separate hearing on the carrier. Then we want one on our NATO commitments that I mentioned to the Secretary is something that we are going to pursue in terms of what is the cost of maintaining our ground forces there.

I would like to ask your cooperation in this scheduling because it is going to be a different type of schedule than before as far as our committee is concerned.

Last, Doctor, and I will submit a series of questions we have prepared here, let me go back to the thing that Senator Andrews was talking about in terms of the question as to what was classified and what was not classified with regard to the bomber program. Was that story really factual? Is that the third time the Department has reclassified information after it had been discussed in an open hearing?

Dr. **DeLauer**. It beats me, but I know this one was attributable to me. In a discussion with the Armed Services Committee in the Senate, a discussion that Senator Cohen and I had about the thing in an open hearing, we talked about the schedule. He asked me what the IOC was and I gave him a number. The minute I got it out of my mouth I was informed that in the past that had been classified and we were in open session. So I was the guy responsible for that particular bit of information. We would have liked to have deleted that from the record and it has caused more problems than it is probably worth.

Senator **Stevens**. Yes, I think it has. I think it has damaged the security program in the very fact that it was raised after it had been in open session. But beyond that, I want to have a hearing on the whole question of classification and the subject that Senator Rudman mentioned and we have all been discussing, and that is what can we do to get more of this information into the public sector. Is that any part of your responsibility in your office to deal with the intelligence community?

Dr. **DeLauer**. I only deal with them as far as the equipment and acquisition side. The policy side and the issue of classification does not lie in any of my responsibilities other than in complying with what I have been told of what we are required to do.

I think that is a subject that ought to be carried out either with the Secretary or the Deputy Secretary. I really do. Personally I think it is to our advantage because the threat is real, and we ought to be able in some way to convey to the Congress and to the American public that there is a threat.

People are talking about a $5 billion cut or they are talking about a $7 billion cut. When you look at the total economic picture and what the deficit might be, the $7 billion cut in the defense budget isn't going to change that deficit, other than by perception, by enough to do the things that have to be done in order to get some of the economic situation under control, interest rates and so forth. A $5 billion cut, if say you took it out of procurement or R. & D., is going to slow down and is going to cripple the force modernization part of the President's defense program and the threat is still there.

DECLASSIFICATION OF BRIEFINGS

Senator **Stevens**. I think we need your help in helping get some of these things declassified. We have been given these threat briefings, and I have said before that this one this year startled me more than anything has in my career in the Senate. The changes between that briefing from last year to this year are so dramatic that unless you can talk about them so one can understand why we are reacting the way we are.

We went to our full committee the other day and told them we weren't going to take any cut in this defense budget. I will tell you they are not going to go along with us until we can, in fact, get the public informed as to what we know.

I think your budget is the one that is going to be cut, frankly. That is the message I have been trying to get to you. The way we look at is you have the growth and you are going to have the cut unless we can declassify some of this information.

Their air arm, their Navy, their land forces, their whole global strategy and the changes of it within the last year, the public must be informed of that or your growth is not going to be allowed. We have some very strong prodefense people here saying well, you can hold the line. What is wrong? You are getting along all right in 1982. Why can't you be held to that level in 1983? It rings awfully good in a year like this, Dr. DeLauer.

So you have to help us get that declassification. I don't know any way to deal with this budget and I can predict to you that you are going to lose substantially and maybe even have a negative growth unless we can get some of that information out. I don't know what the other members of the committee believe, but that is my feeling.

We have not just one hand tied behind our back, we are being blindfolded, have plugs in our ears, have both hands tied behind our backs, and we are supposed to go do battle for this budget as far as the Defense Department is concerned. Somehow I wish you hadn't showed it to me. I can't talk about it. People around here just think I am some sort of kook. I talk to people every day and I say no, you can't cut that budget. They say, why? I say, well, come up and we will get you a classified briefing. I say, what good does that do me I go home?

I would say this, that within the last year the Defense Department and the intelligence community has overclassified more than I have seen them do before. I think the reactions that were shown by this business of that one comment you made, my God, that is just one number that has been bandied about several years, and to make a thing out of it shows me someone over there is getting schizoid about classification.

We are going to lose this budget, Doctor, unless we can get rid of that overclassification syndrone that is coming out of the intelligence community. I think your people are not standing up to that community as hard as they should.

Dr. **DeLauer**. I will take your message back, Mr. Chairman, and I will be an advocate for your point of view.

Senator **Stevens**. That is why we are going to have those Friday morning sessions. Well, we are nothing but your gladiators when it comes right down to it in trying to get the money for you.

Dr. **DeLauer**. Let me tell you last fall you certainly were.

Senator. **Stevens**. Well, we are going to try to do the same thing this year, but we can't do it this time just on another one for the Gipper, I can tell you that. [Laughter.]

Dr. **DeLauer**. I will carry that message back, too.

SUBMITTED QUESTIONS

Senator **Stevens**. The questions submitted by committee members, together with the answers will be inserted in the record at this point.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

Value Engineering

QUESTION: Dr. DeLauer, is the Department of Defense exploring greater utilization of the "value engineering" concept, which is designed to motivate contractors to help cut costs? What specific initiatives are you taking to permit greater use of the value engineering policy?

ANSWER: The Department of Defense is seeking to revitalize its in-house and contractor value engineering programs. Accordingly, we have initiated several actions to encourage increased participation in our contractor value engineering program. As evidence of our increased interest and expectations for contractor value engineering, we have called for submission of value engineering program plans by each of the Military Departments. Additionally, working with the Military Departments, we intend to sponsor a variety of government/contractor meetings to emphasize our interest in an effective and workable contractor value engineering program.

We are simplifying the current value engineering clauses in the Defense Acquisition Regulation to permit "no cost" value engineering changes. These "no cost" changes permit the contractor to keep all savings in the instant contract while the government will retain all future savings. This process reduces the administrative effort needed to approve and negotiate value engineering change proposals.

The Army has published its plan to expand value engineering Army-wide and expects to fully implement it by FY 84. An Air Force action plan with a broad menu of initiatives has been drafted and it is expected to be published this summer.

The Navy is undertaking a pilot project for shared risks-shared benefits productivity enhancing projects scheduled for FY 84. These projects, although not value engineering, will be based on the Defense Acquisition Regulation (DAR) value engineering language as a vehicle to fund the cost and share the benefits from these projects.

Headquarters, Defense Logistics Agency has stressed to all Defense Supply Centers, top managements desire to increase value engineering participation by its contractors.

Together, these and other activities are expected to significantly increase contractor participation in our value engineering program, to foster a climate of mutual cooperation by government personnel and contractors which we expect will lead to a significant increase in the submission and acceptance of value engineering change proposals and permit us to share in the resulting increased saving benefits.

Inflation

QUESTION: You are using a 6% inflation rate for R&D programs in FY 1983. Do you feel that this is realistic? How does that compare with our recent experience with inflation in R&D in past years?

ANSWER: Based on recent price movements in the economy, a projected inflation rate of 6% for R&D programs in FY 1983 does not appear to be overly optimistic. A 6% rate of inflation would not compare favorably with recent year price experience in R&D. However, all sectors of the U.S. economy, both public and private, are emerging from a period of double digit inflation. The Consumer Price Index (CPI) is currently running at about a

4% annual rate. The Producer Price Index (PPI) for the first quarter of FY 1982 shows a price decline of .4% at an annual rate. Finally, the Commerce Department's implicit price deflator for national defense purchases of goods and services indicate considerable moderation in the rate of inflation.

THRESHOLD TEST BAN TREATY (TTBT)

QUESTION: When was the last time we tested nuclear warheads above the 150 kiloton level? What is the status of the departmental review of the unratified Threshold Test Ban Treaty by which we are abiding? Shouldn't we test our new warheads before their actual deployment on the MX and the new TRIDENT II SLBM?

ANSWER: The last time the United States conducted a nuclear test with a yield greater than 150 kilotons was on March 17, 1976. The interagency review of US nuclear testing limitation policy is still on-going. Formal consideration by the National Security Council of a policy options paper is (deleted). Development testing for the MX warhead (W87) has been completed. Warhead candidates for TRIDENT II will be tested over the next few years. Certification of warhead performance under the TTBT is approached cautiously on a case-by-case basis by the Department of Energy (DoE). For meeting requirements for yields above 150 kt, the DoE generally relies on the test data base and (deleted) tions of designs previously tested at full yield prior to the (deleted).

Antisatellite Program

QUESTION: Is the Department regularly reviewing the Space Defense, or antisatellite (ASAT) program to insure that cost growth similar to that which occurred last year does not happen again?

ANSWER: The OSD staff provides continuous contact with the appropriate Air Force offices involved in the development of the US ASAT. In fact, a major program review is scheduled for presentation within OSD during April. At that time we will again review the Air Force budget proposals, procurement projections, test program and IOC to ensure that we are continuing on the most feasible, cost effective course. It should be noted, however, that this prototype program, as in other R&D endeavors, contains some degree of development risk. These risks could affect fiscal projection as testing progresses.

DoD Organization for Space Operations

QUESTION: As part of his recent report to this subcommittee on the Consolidated Space Operations Center, the Comptroller General concluded that there was substandard planning for military use of space. The recommendation was that the Secretary of Defense designate a single manager for all military space development and operations. Do you agree?

ANSWER: No. We do not agree that Department of Defense planning for space is substandard, nor do we believe that designation of a single manager for all military space development and operations is appropriate. We view space as a place to deploy systems as an adjunct to other means of accomplishing assigned missions such as those of providing communications, surveillance, navigation, and meteorological support. Space systems provide support across the spectrum of mission areas and compete within these functional areas with other types of systems in establishing the most effective means to accomplish a given mission. We fully recognize that space does have unique aspects and that the support structure is large and expensive to operate. For this reason, the Air Force is the focal point for launch and orbital support for military space systems. This "single manager" approach for common support functions is efficient and has been implemented; operational control of space systems is vested in those organizations having responsibility for the missions which the various space systems support. When a new and unique mission in space mandates, an organization responsible for planning and execution of that mission will be designated. We maintain that the present functional approach to management and operation of space systems is efficient and appropriate and is the most effective way to ensure exploitation across a broad range of applications unconstrained by artificial organizational boundaries.

Consolidated Space Operations Center

QUESTION: GAO also suggested substantial savings could be effected by intergrating additional systems in the Consolidated Space Operations Center. Specifically identified were the Space Defense Operations Center, Global Positioning System, and Defense Meteorological Satellite Program. Is this an appropriate area for C^3I integration?

ANSWER: We have considered integration of various space related command and control functions within the Consolidated Space Operations Center and will implement these concepts to the extent it is economically and operationally prudent to do so. Specifically, current CSOC planning envisions integration of the Global Positioning System command and control elements and internetting of Defense Meteorological Satellite Program ground stations. Close interaction between SPADOC and all space control elements (including CSOC) will enhance mission effectiveness, and collocation of SPADOC and CSOC was considered. However, collocation in the Cheyenne Mountain Complex is not feasible due to physical space limitations; collocation in the CSOC does not recognize the operational relationship of the SPADOC in the CINCAD command structure, working directly and intimately with the Cheyenne Mountain Complex Command Director in accomplishing the entire spectrum of space defense missions. Thus while collocation of SPADOC and CSOC is not advocate, real-time communications interfaces will be implemented.

Reprogramming Authority

QUESTION: Why do you need more flexibility in transferring funds between Procurement and R&D? Does this imply an inability to budget accurately? What's the point of maintaining separate accounts if we provide such broad transfer authority?

ANSWER: There are many occasions during a fiscal year when problems arise in a given development program. The problems can be most effectively solved if the Department had the authority to transfer funds from the procurement account back to the R&D account to quickly finance appropriate "fixes". The authority we seek only applies to transferring funds from a single program in procurement to the same program in R&D. (Example: TOMAHAWK procurement funds to TOMAHAWK R&D). Transfers from one procurement program to a dissimilar R&D effort would continue to require prior approval by Congress. Much time can be saved by this approach and this is easily translated into cost savings and availability of equipment to the forces. We would consider this authority to be very narrow in scope and would expect to be required to notify the Congressional oversight committees quickly on those occasions when we needed to use the authority.

Defense Nuclear Agency

QUESTION: Mr. Secretary, the Defense Nuclear Agency budget requires increase by nearly 25 percent this year, from $260 million to $326.6 million. Is this increase primarily for augmenting the underground nuclear test effort or to start new DNA programs? Why such a large increase?

ANSWER: About half the increase is to restore the underground test program (UGT). The other half is to begin to rebuild the long neglected nuclear weapons effects technology base. There is essentially no money for "new programs." Over the past decade, DNA was directed to assume major new roles in many critical areas, including physical security of nuclear weapons sites; theater nuclear weapons survivability; advanced strategic systems survivability and effectivness, particularly MX; the endurance of command, control, and communications (C^3) systems for both the US and NATO; and the revitalization of theater nuclear weapons including the wide range of employment and deployment issues. As this was done without providing additional funding, DNA was forced to reduce its research on basic nuclear weapons effects and the underground nuclear testing (UGT) program. As a result, the frequency of nuclear weapons effects testing decreased from about two per year to one every two years. Not only did the underground testing capability seriously erode, but important data on the vulnerability of strategic systems were not being obtained. In addition, the lack of a vigorous nuclear weapons effects technology program has resulted in significant gaps in information to design or employ new weapons systems.

As part of the DoD/DoE augmented UGT program approved by the President, the UGT increase from FY 82 to FY 83 ($31.7M) will enable DNA to upgrade severely degraded facilities and equipment, and increase the number of tests to a level equivalent to that of the early 1970s (about two per year). This will provide the necessary support to systems developers, especially the Air Force MX missile and ABRV and Navy Trident II, and to provide crucial nuclear weapons effects data required by SAC, JSTPS, Air Force Space Division, and the Air Force Ballistic Missile Office. The augmented program must be maintained to provide needed survivability, hardening, and effectiveness data in a timely manner to support strategic systems development schedules and to restore the only national test program to investigate critical nuclear survivability and vulnerability issues on US or enemy systems.

The remaining approximately 50 percent ($35.1M) of the FY 82 to FY 83 budget increase will correct a corresponding diminution in the DNA's long range R&D technology base program. Vital DNA technology base programs that will be enhanced or taken out of a "caretaker" status include: the development of a first-time capability to use high explosives to simulate a height of burst nuclear weapon detonation for realistic systems testing and targeting data; the development of an expanded aboveground radiation simulator capability necessary to support the UGT program and a first-of-a-kind transportable EMP simulator for testing Army tactical systems; large-scale blast/thermal simulator development; the initiation of a DNA directed, Service-wide EMP technology development program to initiate the standardization of vitally needed EMP protection specificiations and engineering design standards for US strategic systems with early emphasis on strategic aircraft and communications, command and control facilities; the acceleration of hardening assessment and testing techniques to more adequately meet the needs of the satellite community as the US plans increasing reliance on space for tactical warning, trans attack communication and battle management; the integration of state-of-the-art hardening technology into the development and manufacture of VHSIC microelectronics; the establishment of a DoD nuclear weapons storage Operational Test Site at Fort McClellan, Alabama; increase theoretical investigations into high altitude nuclear weapons effects phenomenology as related to space communications, surveillance and ballistic missile defense systems survivability and hardening.

It should be noted that the concerns about the level of effort in the technology base and underground test programs has been shared by the last two Administrations and has resulted in the enhanced funding. Without these resources, DNA will not be able to satisfy vital nuclear weapon effects requirements.

EXPORT CONTROL

QUESTION: Can you describe for the subcommittee the efforts DoD will undertake this year in the area of technology export control? Are our West European allies following our lead in this area?

ANSWER: It is DoD's objective to protect US lead times in the application of advanced technologies to military use. DoD has several technical and/or political initiatives under way to improve control of technology transfer from the West to the East. These include the Militarily Critical Technologies List (MCTL), the Coordinating Committee (COCOM) List Review, the COCOM High Level Meeting, and the NATO Technology Transfer Study. First, the MCTL is a detailed and structured technical statement of development, production and utilization technologies which the DoD assesses to be crucial to given military capabilities and of significant value to potential adversaries. It is a technical reference and source document to support the development of export control policy and specific COCOM and Commodity Control List (CCL) proposals. A "strawman" 1982 revision is expected in May.

Second COCOM, whose membership is made up of the United States, other NATO nations (excluding Iceland) and Japan, will undertake a review of the list of items and technologies now under international embargo to the Communist world. While the responsibility for negotiating a revised COCOM List, which will protect US interests, rests with the Department of State, they must rely heavily on technical support provided by the Department of Defense.

(Deleted).

EXPORT CONTROL

In addition, OUSDRE has directed the Services and Defense Agencies to establish a program element in FY 1984 for control of technology transfer. Finally, we are seeking means for converting some of our temporary manpower spaces in export control into permanent ones and establishing new manpower spaces for some of the undermanned functions.

PRE-PLANNED PRODUCT IMPROVEMENT (P^3I)

QUESTION: Mr. Secretary, in your statement you note that about forty programs have been identified as having potential for pre-planned product improvement. Can you provide us a list of those 40 programs? What are the top 2 or 3 most important ones being considered, from your view point?

ANSWER: The potential candidates for P^3I are divided fairly equally between the Services and cover most categories of military equipment. At the advice of the Services we have deliberately refrained from further identifying the programs at this time so as to avoid providing a premature and faulty signal to either the Congress or industry. These candidate programs will acquire official substance and priority during the FY 1984--1988, Five Year Defense Program Review. The Service proposals will be submitted to OSD in May of this year.

Completed Contract Method of Accounting and Multi-Year Procurements

QUESTION: Mr. Secretary, some concern has been raised recently about the impact on multi-year procurement of the President's tax revision proposals. We understand the abolition of the "completed contract method of accounting" would deny tax breaks to defense contractors who are involved in multi-year arrangements, and that the increased cost to them would be passed on to you and, ultimately, to the taxpayer.

To what extent does the Defense budget recognize that potential cost increase? Will it be necessary to increase your multi-year funding if this tax reform is enacted? Please supply your best current estimates on the cost impact.

ANSWER: It is important to understand that the proposed revision to the IRS code would have no direct bearing on the projected total budgetary savings on Multi-Year Procurements (MYPs) for major weapons systems.

Use of the completed contract method of accounting is an accounting and tax practice that can be applied to long-term manufacturing programs involving unique items not normally carried in inventory or items requiring more than a year to complete. This practice is allowed regardless of whether contracting is accomplished through a series of contract actions for individual program years or through one MYP. Defense contractors have been using the "completed contract method" in many cases involving long-running major weapons systems that have been funded through a series of annual buys.

The Treasury proposal eliminating this current tax practice may well result in some associated price increase on the overall acquisition cost of such major weapons systems. However, the proposal would affect projected acquisition costs for both annual buys and MYPs proportionally since both involve more than one year for execution. Since our MYP savings involve the difference between these two alternatives, the change to the tax code does not in any way affect the real and very significant savings that will be achieved through the use of MYP. Therefore, there is no basis to assume the savings estimates in our budget should be revised.

QUESTIONS SUBMITTED BY SENATOR STENNIS

LASER WEAPON CAPABILITY

QUESTION: There have been conflicting reports relative to the capability of the Soviet Union to station a laser weapon in space within the next several years. Would you provide us with your views on their capability?

ANSWER: (Deleted).

SPACE LASER TESTS

QUESTION: Do you believe the Soviets have tested a higher energy laser weapon in space to date?

ANSWER: (Deleted).

TEST KNOWLEDGE

QUESTION: Would it have been possible for the Soviet Union to have tested such a weapon without the knowledge of the United States?

ANSWER: (Deleted).

DEVELOPMENT PROGRAMS

QUESTION: It is believed that the Soviets are spending three to five times the amount that the United States is on high energy laser (HEL) weapons development programs. This includes both strategic and tactical weapons. Would you comment on your understanding of their capability in this area, as opposed to the success of our efforts?

ANSWER: Soviet laser beam weapon development has been a high priority Soviet goal since the late 60's. (Deleted) large development and test facilities have been built. The size and continued growth of several of these facilities have no counterpart anywhere else in the world. (Deleted).

Very High Speed Integrated Circuits (VHSIC)

QUESTION: There are indications that you would prefer to add $14 million to the current budget request of $66 million for the Very High Speed Integrated Circuits (VHSIC) program. Why is this, and why was it not included in the fiscal year 1983 budget request?

ANSWER: A Defense Science Board Task Force on VHSIC recently completed a careful analysis of the funding requirements for the VHSIC Program. The analysis, which was completed in February 1982 after the FY83 budget was submitted, resulted in a recommendation of $80M for the FY83 program. This funding level was recommended because of the critical need to augment the Phase 1 contract developments with additional technology support contracts. Support efforts need to be initiated in key areas such as development of a standardized hardware description language, advanced lithograph technology, assessment of vulnerabilities to EMP and other environmental threats, software configuration management, device packaging, improved silicon starting materials, and alternative device technologies for radiation hardness. Work on Phase 1 contracts has progressed to a point where it is known that these are areas of important generic value to all the mainline Phase 1 developmental efforts. It also should be noted that the recommended support efforts will be of significant strategic interest to the U.S. semiconductor industry. Without the enhanced funding, the support efforts will not be initiated. The effect would greatly lessen the overall impact of the VHSIC program.

Advanced Rotary Wing Aircraft

QUESTION: Tell us about your plans for the Advanced Rotary Wing Aircraft. What type of mission will this technology be oriented toward?

ANSWER: The Department of Defense has established a joint Vertical Lift Aircraft (JVX) development program with the Army being the lead Service and the project manager being from the Marine Corps. This program is oriented towards developing a new aircraft to perform a variety of missions in all four Services. The initial goal will be to produce a medium-lift class aircraft to meet critical needs for replacement vehicles in the Marine amphibious assault and multi-service combat search and rescue mission areas. Beyond these roles, other JVX and JVX derivative applications will incorporate JVX technology across the widest possible range of missions consistent with the aircraft's capabilities including special electronic missions, medical evacuation, special operations, carrier on-board delivery, anti-submarine warfare, etc.

Five-Inch Guided Projectile and SEAFIRE Programs

QUESTION: The fiscal year 1982 Defense Appropriations Act included $16 million for continued development of the SEAFIRE fire control system and five-inch guided projectile programs. I'm told the Marines are very interested in these programs to support their amphibious operations. Yet DoD has cancelled the programs and plans to reprogram the funds. Why is this? What have we spent to date on these programs? Weren't they well along toward the procurement phase?

ANSWER: The SEAFIRE fire control system and five-inch guided projectile programs were terminated to support an outlay reduction. The requirement for the capability provided by these systems was not questioned. The Navy recommendation for termination was based upon the fact that the cost to procure the systems had exceeded affordability limits.

During January and February 1982, the decision was reviewed based on the belief that a program plan could be developed that would allow procurement within the affordability limit. When this was not possible the programs were terminated on February 19, 1982.

The October 1981 funding profile for the SEAFIRE Fire Control System and the Five-Inch Guided Projectile Programs are presented below.

	FY81 and Prior $M	FY82 $M	FY83 $M
SEAFIRE (64607N)			
RDT&E	36.4	16.7	22.5
Five-Inch GP (64608N)			
RDT&E	117.9	3.1	1.0
Procurement	-	15.8	28.2

Approximately $154M were spent on the development of these two programs in FY81 and prior years. Procurement of the Five-Inch Guided Projectile would have started in FY82 if questions of affordability had not been raised. Development of the SEAFIRE would have continued though FY85 with initial deployment on the first DDGX in 1986.

M1 Tank and Future Tank Program

QUESTION: There have been a number of press reports recently about funding a new generation of battle tanks, even though the M1 is only now being introduced in Europe. What can you tell us about this?

Is it possible that a number of the innovations that will be forthcoming from the development effort can be integrated at some point in the production line of the current M1 tank?

The M1 tank took approximately 20 years from initial development to fielding of the weapon system. Do you foresee this as a possibility for the next generation tank?

ANSWER: The program referenced is a tank test bed project designed to look at new ways to build and operate tanks in general. It is an R&D effort, and, although it will employ some M1 components where appropriate, its purpose is to investigate radical new design and operational features to meet the threats of the next decade. Separately from this new development program, changes to the M1 tank will naturally be made in order to improve its effectiveness, but these are smaller and less radical deviations than those which will be incorporated in the new test bed program. The M1 changes will be careful, fully tested product improvements to the basic weapon system, as differentiated from the wide ranging investigations which characterize the test bed program. It is precisely this approach, looking ahead at future needs, which will reduce the required development time for the next generation tank.

The Defense Industry

QUESTION: Jacques Gansler in his book, "The Defense Industry," charged that we are spending more money, getting less equipment and not really strengthening our military position. Do you agree with his charges?

ANSWER: As you know, Mr. Gansler's book covered a large number of problems affecting the defense industrial base that contribute to cost growth and are influenced in part by actions taken by the government, industry, the Congress and the international community. Our major programs represent high-technology and therefore result in extremely complex systems that are expensive to purchase. This coupled with the cyclic nature of the defense procurements causes further cost growth in many of our programs. We are implementing several initiatives with the help of the Congress that will stem some of this cost growth and dampen the cyclic nature of our business. Some of these were identified in Mr. Gansler's book. The specific initiatives were presented to you by Mr. Carlucci, Deputy Secretary of Defense, when he testified on February 8, 1982. We are very conscious of matching our funding and equipment needs to meet our desired military strength. A major effort to improve this matching was reflected in decisions we made to delete or restructure some sixty existing and new start programs of lower priority, which although desirable added less to our overall military capabilities. A continuation of this type of effort and further refinements in our intiatives should strengthen our military posture.

New Weapons Expenses

QUESTION: Isn't it true that the increase in spending for new weapons over the next five years will be greater?

ANSWER: Our "Acquisition Improvement Program" involves several initiatives that should assist in our efforts to improve our five year projections. The initiatives are: Budget to Most Likely Cost; Budget for Technological Uncertainty; Front-End Funding for Procurement of Adequate Test Equipment; Multiyear Procurement; Economic Production Rates; and Defense Contractor Capital Investment. These initiatives as discussed by Mr. Carlucci, Deputy Secretary of Defense, in his testimony before the Senate Armed Services Committee on February 8, 1982, should improve our budget estimating, dampen our cyclic acquisition process, derive better efficiencies in the industrial base and result in an overall improvement in our projections. However, a major threat to the credibility of the Defense Department and to the defense budget is the role of inflation. Last year, for example, inflation accounted for about 70 percent of the total cost growth for our major systems. The potential ripple effect this has over a five year projection is tremendous. We believe this problem can be greatly resolved by using inflation indices based on specific commodity price experience where inflation rates differ from those in the general economy. We have added $2.2 billion in FY 1983 and $38.9 billion for the FY 1982-1987 period for just this purpose. We believe these steps will move us closer to effective control over cost growth in the next five year period.

DEFENSE INDUSTRY

QUESTION: Is the Defense Industry really capable of the rapid buildup that is dedicated by the current budget request?

ANSWER: Yes. We believe that our programs are time-phased so that industry can efficiently produce our requirements.

QUESTION: Isn't it possible that the rapid influx of funds will only increase costs as lead times for weapon systems are lengthened?

ANSWER: Increased procurement levels will permit more efficient levels of production and add stability to the DoD Acquisition Process. With this added stability and the desirable rates of production it is expected that lead times will improve and costs will tend to go down rather than increase.

Joint Service Programs

QUESTION: Dr. DeLauer, Secretary Lehman has been quoted as saying that the Cruise Missile Program has been one of the most successful development programs in history. As you know, this was due in no small part to the joint service program office. What is your opinion of joint service developments and specifically as they relate to management of missile programs? What is the future of the joint service program office?

ANSWER: Over the course of years we have effectively used this management technique whenever there was a meaningful need. It has been very effective on those programs where a strong joint utilization exists for a system or in those instances where the combatibility of several elements of a system are interchangeable or are derived from the same development base. Missile programs frequently satisfy the above characteristics and have resulted in more successful joint ventures than other types of programs. We will continue to use this type of service assignment whenever the program/system characteristics and circumstances lend themselves to its utilization.

ALCM

QUESTION: The General Accounting Office has questioned whether initial operational capability of December 1982 for the Air-Launched Cruise Missile (ALCM) can be met for a fully operational missile. What is your opinion?

ANSWER: The risk toward achieving a December 1982 Initial Operational Capability (IOC) is low to moderate. This assessment is based on the concurrency between the ALCM and B-52 OAS programs. First Alert Capability (FAC) was successfully met in September 1981. We do not anticipate problems achieving IOC as scheduled.

QUESTION: Is it possible that the ALCM may have to be deployed in significant mumbers with operational limitations? Wouldn't this require costly modification in the future?

ANSWER: No. The GAO conclusions are based on test and evaluation results that were completed during early ALCM testing. Recent test experience has shown that operational problems experienced early in the program have been resolved. The only modification planned for the current ALCM (AGM 86B) is an ECM mod which is a survivability enhancement rather than an operational limitation. The Air Force is, however, evaluating prospects for an improved ALCM.

QUESTION: What would be the effect of funding procurement of only a limited number of ALCMs until the operational difficulties are resolved?

ANSWER: We are committed to procuring ALCMs at a rate consistent with force structure requirements. Any interruption in missile deliveries would reduce U.S. strategic capabilities until the planned schedule could be resumed.

TOMAHAWK CRUISE MISSILE

QUESTION: The TOMAHAWK conventional land attack cruise missile production decision date has been delayed to May 1982 and initial deployment to June 1982. Isn't it true that, even with these delays, only limited types and geographical locations of targets can be effectively altered?

ANSWER: Within the missile's design range, there will be limitations to hit certain (deleted) targets (deleted) a variable dive angle terminal maneuver becomes operational in (deleted). However, there are numerous other naval threat targets in the Soviet Union that can be attacked effectively with the missile as initially deployed. Mapping material will also be available at initial operational capability to support missile use against (deleted) targets in the Soviet Union as well as targets (deleted) which have been identified by the Unified Commanders. The Defense Mapping Agency's programmed mapping capability will more than keep pace with yearly increase in missile inventory. In summary, at fleet introduction, there will be significantly more threat targets which can be attacked effectively than there will be missiles deployed.

QUESTION: The TOMAHAWK is to be used against a wide variety of high-value targets. Is it wise to deploy a significant number of missiles that will have operational limitations?

ANSWER: The additional strike firepower which TOMAHAWK will provide the Navy, as well as expected missile performance, as initially deployed, far outweighs a few operational limitations which will be eliminated by planned product improvements. The TOMAHAWK conventionally armed land attack cruise missile, deployed first with the Bullpup W-4D warhead, generally has adequate performance for a broad range of potential (deleted) targets. Bullpup is not the optimum warhead for some specific targets, but is a suitable compromise between penetration capability, fragmentation pattern and blast effects. (Deleted) this missile will have the capability to deliver (deleted).

By the end of FY 1982 only six conventionally armed land attack TOMAHAWKs will have been delivered. This number will increase (d) by the end of FY 1984 and (d) by the end of FY 1986. Projected missile performance against threat targets to U.S. naval units, both sea based and land based, is more than adequate to justify planned procurement and delivery rates.

Cost Benefit of the ABRV

QUESTION: I'm told that the Air Force made a strong recommendation in support of the Mk-12A re-entry vehicle rather than the Advanced Ballistic Re-entry Vehicle (ABRV) which is essentially a conceptual design. One of the arguments was that it would cost an additional $1 billion to develop the ABRV to operational capability. Do you believe the marginal increased effectiveness against enemy targets is worth the additional cost?

ANSWER: Developing and producing the ABRV will cost DoD $881M (FY 82 $) more than the Mk-12A would. Offsetting this is the cost to upgrade the Mk-12A fuze and warhead ($259M) had it been selected. Thus, the net cost to DoD is $622M. In return the ABRV provides the following:

- Oralloy savings, worth about $500M
- Option to increase the yield if necessary (without oralloy savings however);
- Warhead diversity in the ICBM MIRVed force;
- Reduced risk of missing the IOC because the ABRV's warhead has been tested with advanced safety features while the Mk-12A's has not.

It is our judgement that the ABRV's flexibility and enhanced capabilities are well worth the incremental cost to the DoD particularly in view of the fact that the costs to the government are largely offset by the savings in oralloy.

MK-12A LOGICAL CANDIDATE FOR DEPLOYMENT ON M-X

QUESTION: General Lew Allen stated last year that the "MK 12A is the logical candidate for being deployed on M-X." What has occurred to change the mind of the Air Force Chief of Staff?

ANSWER: The Air Force supported the MK 12A as the baseline M-X RV for cost and schedule reasons. Up until last fall, it appeared that ABRV could not be made available for M-X deployment until late 1987 -- a full year later than the currently scheduled system IOC. Also, there were no funds in the Air Force Budget for ABRV.

The schedule problem was eased last October when the Ballistic Missile Office, after reassessing the ABRV effort, concluded that an arming and fuzing system being developed by the SANDIA corporation could be made available in time to meet a late 1986 M-X IOC.

The cost problem, from an Air Force perspective, was resolved when OSD provided funding concurrent with the announcement of the ABRV decision.

Since these two major concerns have been resolved; the Air Force supports the ABRV and the benefits it brings to the M-X program.

MK 12A VERSUS THE ABRV

QUESTION: Last year, it was felt that late 1987 was the earliest possible date for having an ABRV available. What has changed during the year that will ensure the availability of the ABRV to meet the M-X IOC of 1986? Are you satisfied that a mature, tested system will be available in 1986?

ANSWER: The Ballistic Missile Office, in reassessing the entire ABRV effort, concluded that an arming and fuzing system being developed by the SANDIA corporation could be made available in time to meet a late 1986 M-X IOC. The late 1987 availability referred to in your question was based on the AVCO fuze.

Additionally, redirection of the ICBM program in response to the President's October decision caused the IOC to move from July to later in the year. These factors combined to produce the change, and we are confident that a mature, tested system will be available in time to meet the planned M-X IOC.

MK 12A VERSUS THE ABRV

QUESTION: The ABRV is to have a higher yield for the air-launched version of the M-X ICBM. However, isn't it true that the performance differences of the MK 12A versus the ABRV are very small?

ANSWER: The hedge provided by increased warhead yield would be common to both air launched and ground launched M-X. Although some form of guidance update would be required if M-X were to be air launched to obtain accuracies in the (deleted) range programmed for M-X, performance of either the MK 12A or ABRV at equivalent yield would be essentially the same at this CEP. Also, there is little to be gained from upgrading yield at this accuracy.

Should accuracy degrade to the (deleted) range, however, then increasing yield could provide a useful hedge. ABRV provides this flexibility while MK 12a does not.

(Deleted) Savings

QUESTION: The high-yield warhead design of the ABRV uses more (deleted)(nuclear material) than the Mk-12A warhead. Where does the argument come from maintaining a savings in (deleted) when both systems have roughly equal effectiveness against enemy targets?

ANSWER: The yield of a warhead can be reduced from its maximum yield (d). Because of differences in warhead designs and packaging constraints, it turns out that when the ABRV yield is reduced to be the same as the Mk-12A's, the ABRV requires considerably less oralloy than the Mk-12A.

Effect of an Additional RV

QUESTION: The proposed ABRV will be heavier than the Mk-12A. Is it possible that incorporation of an additional Mk-12A re-entry vehicle on the M-X would tilt the operational effectiveness against enemy targets to the Mk-12A?

ANSWER: It is our plan to deploy 10 ABRV's on M-X in keeping with our decision not to exceed negotiated limits while the START review is underway. While an additional RV would improve the system effectiveness in certain employment options, it would create footprint and attack timing problems in others. Additionally, it should be noted that the M-X can accommodate 11 ABRV's and even 12 if we were willing to modify the reentry system's RV mounts.

INSENSITIVE HIGH EXPLOSIVE

QUESTION: When will the Insensitive High Explosive (IHE) tests be conducted on the MK12A warhead (W-78)?

ANSWER: (Deleted).

Flight Testing

QUESTION: There have been over 400 flight tests on the Mk-12A. Have any flight tests been conducted on the ABRV?

ANSWER: The Mk-12A has not flown over 400 times: It has flown 48 times on 19 missile flights. The rest of the flights were Mk-12's which differ from the 12A in the nosetip, fuze, warhead, antennae, and weight.

There have been three flights of the preprototype ABRV. In addition, the ABRV design will be based on the Mk-12A experience and data gained from various ABRES flight test experiments which were designed to address ABRV issues.

YIELD OF ABRV AND MK12A WARHEADS

QUESTION: Both the ABRV and the MK12A warheads can reduce strategic nuclear material from their maximum yield design. What are the lower limits?

ANSWER: At any yield, the ABRV warhead uses substantially less highly enriched uranium than does the MK12A (deleted). While it may be theoretically possible to reduce the yields of these warheads to about (deleted) yields less than (deleted) are unacceptable to the DoD because such yields would not meet damage expectancy requirements against hard targets.

EXPLAIN ERROR DIFFERENCES PROJECTED FOR ABRV VS MK 12A

QUESTION: Would you explain the error differences projected for the ABRV as opposed to those of the MK 12A. When one considers the relatively minor differences in the maximum yield of the two weapons, does the relatively small error difference really make any difference in destruction of enemy targets?

ANSWER: The ABRV is judged to be slightly more accurate than the MK 12A because its aerodynamic characteristics reduce reentry dispersion. I must emphasize that the degree of improvement is expected to be small, and at equivalent yield would have little effect upon the attainment of required damage expectancy.

The difference in maximum yield that can be achieved with ABRV is a different matter. For example, should M-X accuracy degrade to the (deleted) range, then military effectiveness could be sustained by increasing ABRV yield to (deleted). The W 78 warhead (MK 12A) cannot be increased in yield above (deleted) and does not provide such a hedge.

MK12A/ABRV FUZE COMPARISONS

QUESTION: Will the MK12A and the ABRV have the same arming and fuzing capability?

ANSWER: The warhead electrical systems for the MK12A and ABRV warheads perform the pre-arm/arm function and are somewhat similar in design and capability. The ABRV design includes an improved integrated fuze (path length with radar update). The current MK12A design has a radar fuze. To have a capability comparable to that of the ABRV fuze, a path length fuze and electronic logic would have to be added.

Delayed Decision

QUESTION: The decision on a new re-entry vehicle could be delayed until the fortieth M-X article since a basing system for the M-X will not be operational until that time. Wouldn't it be prudent to await the decision on the basing mode so as to preclude any changes that might have to be made as a result of the basing decision, particularly in the so-called "soft" mount design in the ABRV?

ANSWER: One of the most expensive portions of a missile development is the test program. A timely decision on the RV allows it to take advantage of the missile flight tests. Delaying the decision would add greatly to the cost of an ultimate deployment decision.

The ABRV is being designed to be compatible with all basing modes under consideration. GE's engineers claim to see problems in the warhead mount. No one else does.

QUESTION SUBMITTED BY SENATOR SCHMITT

Space-Based Lasers

QUESTION: Last year the Congress appropriated $20 million to the Air Force for space-based lasers and an additional $5 million to DARPA. To date the Air Force has been unable to spend the $20 million appropriated due to a decision by the Secretary of Defense. The Washington Post recently carried a story stating that you are concerned about Soviet work and possible breakthroughs in space-based lasers. What impact will the spending freeze on the $20 million have on the IOC of a space-based laser and why, in light of intensive Soviet work in this area, does the Secretary of Defense refuse to allow the Air Force to spend the funds appropriated?

ANSWER: The inability of the Air Force to obligate any funds in FY 82 will defer until FY 83 the start of programs to address a number of uncertainties in mission utility of space-based laser weapons, such as survivability, total system architecture (e.g., surveillance, command and control), and Soviet ability to harden potential targets. This $20 million is one of a number of items which were included in the FY 82 appropriation bill, but were not included in the authorization bill. The Department of Defense is working with the congressional committees to resolve this issue.

QUESTION SUBMITTED BY SENATOR WEICKER

Independent Operational Testing

QUESTION: Dr. DeLauer, you indicated to this subcommittee your opinion that development of a system or an article by one agency and (independent) testing by another is not a good practice. Does this mean that operational testing by the services' independent operational test agencies has fallen out of favor within the Department of Defense? It has only been ten years since OT was being hailed as the answer to many of our procurement ills. Is OT a failed experiment? Given your opinion, can you support future funding for OT?

ANSWER: I support future funding for OT which I consider to be a vital part of our acquisition process. I believe you have misunderstood the thrust of my response. The independent operational tester is as important to the acquisition system as he ever has been. In fact, I have asked the Director of Defense Test and Evaluation to increase his role by taking a closer look at contractor and developmental testing and to get operational testers involved earlier in the developmental process. They must be participants in the process and be constructive in their evaluation. I expect the operational tester to be involved in the hardware development process as early as he can, to insure that operational effectiveness and suitability are built in. He should evaluate plans, identify critical test issues and evaluation criteria, and monitor testing so that we can provide a product that performs adequately in a realistic operational environment. Adequate funding for test hardware is important and will be closely monitored by my staff. The operational tester has not fallen out of favor within DoD.

Operational testing and evaluation has a history of revealing deficiencies that were not uncovered in previous testing. It is an essential part of the acquisition process.

QUESTIONS SUBMITTED BY SENATOR GARN

FY 83 CPA FUNDING

QUESTION: The FY 83 Defense Budget includes $74 million for the study of the Continuous Patrol Aircraft MX basing option. How will this money be spent? How will this differ from the studies that have been conducted in the past?

ANSWER: The planned CPA effort for FY 83 goes far beyond the study phase. If the current survivability analyses by the Defense Science Board and the U.S. Air Force indicate the long endurance aircraft is survivable, the money is intended to technically refine the existing concept, investigate new composite and engine technologies, improve missile guidance for airborne launch, develop the requisite command and control structure, and to initiate major airframe contractor development.

The FY 83 fund ($74 million) will be spent as follows:

ITEM	FUNDING
Aircraft System Studies	$14.0
Technical Analysis Studies	5.0
Composite Technology	10.0
Wing Section Buildup	5.0
Propulsion Technology	10.0
Guidance Update-Missile	5.0
Command, Control, Communications	5.0
Proposal Preparation - Contractors	20.0
	$74.0

The above items are defined as follows:

Aircraft System Studies are the initial contractor investigations of concept feasibility, survivability, vulnerability, etc.

Technical Analysis Studies are the OSD and Air Force-sponsored technical evaluations of the initial contractor efforts.

Composite Technology is an investigation of the composite structure technology required to build a CPA.

Wing Section Buildup is the fabrication of a full-scale wing for the CPA. The purpose is to assure the feasibility of building a large composite structure.

Propulsion Technology is to investigate advanced engine concepts such as regenerative turbo props and high powered diesels.

Guidance Update-Missile is to investigate potential methods to assure the required accuracy of the missiles launched from a moving airborne platform.

Command, Control, Communications is to develop a safe, useable and reliable system design to direct and control the CPA fleet.

Proposal Preparations-Contractors funds initial efforts by four major aircraft contractors to propose specific systems which respond to the system concept defined by OSD/USAF after the Technical Analyses Studies.

ABM TREATY REVIEW

QUESTION: Has your office reviewed the issue of the ABM Treaty, specifically with respect to the question of whether the United

States should seek changes to the Treaty during the 1982 review? I am particularly interested in your assessment of the Treaty's restrictions on the development, test and evaluation of ABM components.

ANSWER: The Administration is currently reviewing its position for the 1982 ABM Treaty review. My office is directly involved in the Administration review. No decision on whether or not to seek changes has been made. However, I would like to point out that our ABM program has been carefully structured to comply with the provisions of the ABM Treaty (deleted).

BALLISTIC MISSILE DEFENSE SCHEDULES

QUESTION: Has your office reviewed the Army's proposed development and test schedule for a terminal defense system for MX ICBMs deployed in silos? Are you confident that this schedule will put us in a position to make a decision on MX basing by July 1983 with respect to the potential role of our ABM system?

ANSWER: Yes, the schedule has been reviewed by the Office of the Under Secretary for Research and Engineering and by what we call the Strategic Programs Executive Committee (EXCOM), which is chaired by the Under Secretary for Research and Engineering and includes the Under Secretary for Policy, the Comptroller, the Director for Program Analysis and Evaluation and a senior representative from each of the Service Secretariats and each of the Services. The schedule that has been defined will produce the information needed to make an informed decision on the feasibility, costs, schedules, advantages and disadvantages of each of the alternatives. As with all of the alternatives, we will not be able to perform as much testing as we would like by July 1983 but we do not believe that there will be any fundamental questions that are unanswered.

M-X REENTRY VEHICLE

QUESTION: In the FY 82 Defense Appropriations Bill, the Conferees provided $22.3 million to keep the Mk-12A production line open and directed that whatever additional funding was necessary to maintain production should be reprogrammed. In light of the decision to use the ABRV warhead for the M-X, what is being done with the $22.3 million provided by the Congress? Why was the decision made to select the ABRV rather than to continue with the Mk-12A program?

ANSWER: We are examining alternative uses of the $22.3 million but have reached no conclusions at this time.

Selection of the Advanced Ballistic Reentry Vehicle (ABRV) over the Mk-12A was based on the following considerations:

- The ABRV is an advanced technology reentry vehicle with an improved fuze, improved accuracy, enhanced all weather performance, and increased hardness against nuclear weapon effects.
- The ABRV warhead will use significantly less nuclear materials than the Mk-12A at an equivalent yield. This could be especially important in the event of a future shortage of these materials.
- The ABRV has the growth potential for a higher yield warhead which will provide an important hedge against future Soviet initiatives.
- Since the Mk-12A is currently being retrofitted onto a significant portion of the MM III force, deployment of ABRV

on M-X will provide an important element of diversity in the MIRVed ICBM force.

- The ABRV warhead will incorporate all of the modern safety features which will reduce even further the already very small chances of a nuclear accident. This is particularly important since mobile basing options for M-X are under consideration.

In view of the above benefits and the importance of the M-X to our strategic modernization program, the additional cost of the ABRV to the DoD is judged to be necessary to provide the M-X with the best reentry vehicle available. Moreover, it is believed that the actual cost to the nation for ABRV could be negligible because the additional DoD costs will be largely offset by the potential savings in nuclear material.

QUESTIONS SUBMITTED BY SENATOR ANDREWS

F/A-18

QUESTION: Despite frequent reassurances from DoD there are continued reports of problems with the F-18 aircraft. What has been done to correct past deficiencies and what steps have been taken to correct those shortcomings?

ANSWER: During early flight tests a low aircraft roll rate was discovered due to greater than predicted wing deflection and aerodynamic damping at high dynamic pressures. The corrective action included increased wing stiffness, increased aileron area, limited trailing edge flap deflection, and differential leading edge flaps. With these fixes incorporated, roll performance -- both steady state and angle of bank in one second--has met all operational requirements.

Early in the program the F/A-18 encountered numerous number 4 fuel cell leaks. Several fabrication changes were incorporated to improve durability, and a stringent Acceptance Test Procedure was imposed. There have been only two number 4 cell failures since October 1980; no fuel cell leaks have occurred on tanks using the new procedures.

The F/A-18 uses fuel to cool the oil in the Airframe Mounted Accessory Drive. It was found that the fuel could not absorb enough heat at low altitude under high ambient temperatures. A simple passive fuel/air heat exchanger was installed in the missile fairing to assist in cooling the fuel. This exchanger has proven to be even more effective than anticipated and the heat dissipation is adequate for any flight condition.

QUESTION: The F-18 is often emphasized by the press as a gross example of sophistication gone awry. There is no doubt that it possesses the sophistication for an all-weather fighter/attack aircraft; what everyone wants to know is whether this bird is consistently flyable and worth its enormous cost?

ANSWER: Reliability and maintainability figures for the F/A-18 continue to exceed the high goals that were set. Reliability goals set for the first 2500 flight hours were 1.4 mean flight hours between failure with actual results at 2.38. The current 200 flight hour moving average is 4.0. Maintainability is measured by direct maintenance manhours per flight hour. The set goal for the F/A-18 at the end of 2500 flight hours was 8.0 and the actual figure was 6.36. The maintainability demonstration, being conducted by Navy personnel, is currently at approximately 5.3 maintenance manhours per flight hour, well below the upper limit goal of 8.0.

Although cost continues to be an issue, F/A-18 unit costs continue to come down as production rates increase. Numerous cost reduction initiatives have been undertaken by the Navy and the prime contractors. The versatility and reliability of the F/A-18 proven thus far have led one to believe the aircraft will be the most cost effective tactical aircraft in the Navy inventory.

Overspecification and High Performance Standards

QUESTION: A frequent criticism of the DoD has been its overspecification and high performance standards in defense acquisition standards. Please cite some examples of this "overkill" in procurement and tell us what has been done to correct this problem?

ANSWER: The Department of Defense does not knowingly overspecify or impose excessively high performance standards. However, obtaining the precise balance between establishing proper requirements for systems and equipment which must withstand a very exacting military environment and overspecifying is not always an easy task. Correlation of environmental testing requirements with those expected in the operational environment is a particularly challenging area. To overcome these problems, the Department of Defense, in cooperation with industry, has a strong program underway with a number of elements to promote the proper application and tailoring of standardization document requirements in the acquisition process. DoD Directive 4120.21, "Application of Specifications, Standards, and Related Documents in the Acquisition Process," issued in 1979 and updated and reissued in 1980, establishes basic policy and controls to ensure requirements are properly reviewed, tailored, challenged, and justified based on actual needs for a particular system or equipment. Another area receiving attention is the content of standardization documents themselves. Key standardization documents have been and are being reformated to promote tailoring and to provide detailed application guidance. For instance, MIL-STD-810B, "Environmental Test Methods," is currently being revised with these objectives in mind. Increased dialogue with and feedback from contractors is another important element in this program aimed at the cost effective application of specification and standard requirements.

VIPER TANK KILLER WEAPON

QUESTION: A frequent criticism of the DoD has been its over specification and high performance standards in defense acquisition standards. ----the most cited example I've encountered has been the Army's VIPER tank killer weapon. Experts have maintained that the performance tests expect too much from the weapon, i.e., submerging the weapon in water for numerous hours and expecting it to fire, when this could never really be to happen on the battlefield.

ANSWER: The requirements document for the VIPER specified submersion in three feet of water for two hours. This requirement was waived in lieu of having passed a 72 hour rain test. Also, there was a higher priority need for a redundant safety feature which affects the water tightness because of a required hole in the launcher. The weight requirement was 6 to 7 pounds. This was waived and 9 pounds was accepted. One could claim that requirements such as these are too stringent. This may well be the case with the water submersion. The weight requirement, however, is more controversial. In this case the Army emphasis is on a light weight system, while the Marine Corps has greater interest in defeating the front armor of the modern tank and may accept a higher system weight than Army. Because of this difference and the high cost of VIPER, the Army (as lead Service) and Marine Corps are jointly reevaluating and will update the Improved Light Anti-tank Weapon (LAW) Joint Service Operational Requirement (JSOR) to accommodate changes in the threat, organizational and operational concepts and affordability. During this review we will make sure that our requirements are not overstated, which can result if Service requirements are merely combined. By 1 August 1982 an up-to-date JSOR will be promulgated or justification will be documented to provide for a mix of LAW's within DoD.

QUESTION: The Extremely Low Frequency (ELF) program has been frequently mentioned as a highly priced item that no one wants in their "backyard." What is the time frame, IOC, and do we have the environmental questions answered?

--The ELF--for shore to submarines-- program has been a problem in deploying because of cost, environmental concerns and deployment capabilities.

ANSWER: Vice Admiral Nagler has indicated in his testimony, that the Governor of Wisconsin is providing full support for ELF and fully supports the President's decision and that the Governor of Michigan is pleased with the Navy contacts with his staff concerning what the Navy's continuing efforts are in Michigan with the ELF project. Senator Proxmire's 1981 questionnaire to constituents indicated a 61 percent favorable support of the ELF project in Wisconsin.

The Navy and independent research teams have conducted more than fifty separate studies in the past eight years. Their results show no adverse effects on humans, plants, animals, or microorganisms at the field levels which are intended to be used. The results of these studies were incorporated into the Environmental Impact Statement which was filed with the Environmental Protection Agency.

At Navy request, the National Academy of Sciences assembled a committee of eminent research and engineering scientists, including biology and ecology experts, to assess the adequacy of existing knowledge and data on ELF electromagnetic effects to identify those effects, if any, which may be of major concern. In August 1977 the National Academy issued a final report on the results of its evaluation and stated that "A number of concerns raised over the years that Seafarer ELF fields might constitute a source of dangerous -- even catastrophic -- environmental contaminations have been examined and found invalid and unwarranted."

The Navy prepared environmental impact statements for the ELF Communications Program in 1977 in compliance with the National Environmental Policy Act. The distribution of the final statement was preceded by a series of seven public hearings, four of which were conducted in the state of Michigan. In December 1981, the Navy distributed a report to supplement previous information to maintain a complete public record on ELF. This report detailed the President's decision, actions completed after the decision, and planning efforts for the immediate future. The Navy is confident that it is in compliance with the National Environmental Policy Act and will stand on its record of documentation and public involvement with regard to the ELF program.

The Initial Operating Capability (IOC) for the ELF system is FY 1985.

There is a perceived lack of clarity on the Navy position with regard to cost considerations. The Chief of Naval Operations has stated that the Navy supports the ELF Communications System at the level of investment now proposed. The problem has always been in meeting new important strategic command and control needs within limited resources. While modernizing the Navy's primary survivable very low frequency airborne transmission system is their top C^3 priority, the small, but improved, ELF system approved by the President complements it in several important ways. This improved ELF system adds a dimension of capability altogether independent from the airborne system and will provide continued insurance against an unforeseen Soviet submarine warfare breakthrough.

The ELF System that has been approved by the President is adequate to meet the Navy's operational requirement. When operating in synchronization, theWisconsin and Michigan facilities give the Navy a nearly worldwide ELF capability. The term "worldwide" does not refer to the entire surface of the earth, but refers to global communications with all U.S. submarines in their normal operating areas.

QUESTION: What steps have been taken to emphasize actual combat realities in bringing RDT&E performance into line? Design changes after production has begun often lead to tremendous cost-overruns; will we see changes in this "gold-plating" policy during the next several years?

ANSWER: Our policy is one of elminating "gold-plating." We carefully review each military requirement to assure ourselves each feature of the equipment is needed to be responsive to the threat. We then tailor development of the system so that its performance and physical characteristics give us the most cost effective system. Design to Unit Production Cost is an extremely useful cost control technique which we apply during the development.

One of our 32 acquisition management initiatives, Pre-Planned Product Improvement (P^3I) emphasizes greater use of an evolutionary approach to meeting requirements. This technique allows us to isolate high risk, schedule pacing features which can be introduced after the equipment is first fielded, after we experience the realities of actual operational experience and after continuous assessment of the threat shows that these "pre-planned" changes are necessary. In P^3I each evolutionary modification must correspond to a level of required military capability. Because P^3I is pre-planned, programmed and budgeted as an integral part of the system acquisition strategy, it should not be put in the category of cost overrun.

HELLFIRE

QUESTION: What problems are we having with HELLFIRE, and can we expect them to be resolved to coincide with the delivery date of the AH-64, APACHE?

ANSWER: The Army is having no problems with the HELLFIRE Missile System. The HELLFIRE engineering development program has been very successful. The missile has proved itself to be an outstanding tank killer and it is ready for production. Of the 185 scored test firings of the HELLFIRE, 162 were successful hits. The 23 that were unsuccessful came generally in the early stages of engineering development. The reasons they didn't hit were discovered, and the necessary modifications were incorporated in the missile.

The tests of the missile have shown its reliability to be a phenomenal .94 and its hit probability against both stationary and moving targets when fired from the AH-64 to be an equally phenomenal .96. It's a very good missile. In fact, HELLFIRE is one of the Army's brightest developmental successes. The HELLFIRE missile production is planned to be available to the AH-64 helicopter.

TECHNOLOGY BASE

QUESTION: The U.S. relies on technological superiority to offset Soviet advantages in manpower and weapons numbers. Yet there is evidence that the Soviets are making significant strides in overcoming the technology gap. What strategy is the DoD pursuing to prevent further erosion of our technological superiority? The FY 83 budget shows an increase in funding of the technology base, in real terms of about 6 - 7%. Is this a sufficient increase to maintain U.S. superiority and will comparable increases be continued in future years?

ANSWER: As indicated in the USDRE statement, maintenance of a strong technology base is one of DoD's major responsibilities. DoD must both adequately fund the research and exploratory development programs and improve overall technology base effectiveness. Actions have been taken in this direction. DoD has proposed strengthening its technology organizational structure by the establishment of an Assistant Secretary of Defense for Research and Technology who will also be the Director of the Defense Advanced Research Projects Agency. This will be particularly effective in transitioning proven technology into military applications. A Defense Science Board summer study report on the technology base has provided recommendations that will form a basis for improving our investment strategy. DoD has taken actions in the FY 1983 budget which will improve not only the research posture of the universities but also their research instrumentation and equipment position. In addition, DoD is taking actions that will improve the national supply of scientific and engineering personnel in areas of interest to DoD. And finally, we are taking a number of actions to improve the effectiveness of our in-house laboratory structure. It is our view that the funds requested, along with private sector research and development efforts, provide a means of maintaining U.S. technological superiority over the Soviets. We intend to continue funding the technology base with adequate amounts.

QUESTION: How does the proportion of strategic and tactical R&D change over the next 5 years, as a percentage of the total R&D budget? Does this reflect an overall plan which envisages a change in the relative importance of strategic and tactical weapons and threats?

ANSWER: Requested spending for strategic R&D as a percent of total R&D has the following profile over FY 83-87; 27 percent, 28 percent, 26 percent, 21 percent. The equivalent profile for tactical programs is 31 percent, 29 percent, 27 percent, 25 percent, 23 percent. Year-to-year comparisons of RDT&E growth rates for the tactical and strategic programs do not provide a meaningful indicator of priorities among these mission areas. One must examine the projected threat, past funding profiles, current inventory deficiencies, the timing of the development cycle, changes in policy and strategy, and blend these with an understanding of technological opportunities over a ten to fifteen year horizon before making such judgements. This is an imperfect art; resource allocation in this area must be based on the collective judgement of the entire Defense community. The program as currently defined represents that judgement. The result is that near-term strategic RDT&E has a higher priority for discretionary funding than tactical programs. However, we are not neglecting RDT&E for tactical modernization. Over the five year program FY 83-87, our planned RDT&E funding for tactical programs is projected to be five percent higher (in real terms) than that for the strategic program.

Extrapolation of R&D Problems

QUESTION: To what extent can the cost growth and technical problems experienced in many weapons procurement programs be attributed to shortcomings in the R&D phase? Are we underfunding R&D programs in the prototype development phase? Are we moving too quickly into production before basic problems are solved?

ANSWER: Sometimes we can find a clear audit trail from cost growth and technical problems in production right back to similar difficulties in the research and development phases. Most often, however, the production problems are distinctly different from those experienced in R&D and that is why we have two series of tests that first examine the R&D models and then the production versions. The tests run on production items generally can be traced to manufacturing process shortcoming and/or production quality control. Occasionally we find design deficiencies that are common to both the R&D and production phases.

We do not knowingly underfund R&D programs in the prototype development phase in a general policy sense. To encourage cost control we do emphasize setting cost goals and thresholds that are somewhat difficult to meet. We also encourage design competition between contractors to keep costs down and we are aware of situations where in contractors have contributed their own funding beyond the government funding just to stay competitive.

We examine each and every major weapon as it transitions from R&D into production to assure that both the weapon system design is complete and that the production facilities are ready. To make that transition smoother and quicker, we allow long lead items and initial production facilities to be started before the production decision. In general, we do not feel that we are making the transition to production too early. On the contrary, we have evidence that we are not making that transition early enough. So, we have stressed concurrency between testing and start of limited production to minimize the total acquisition cycle.

Impact of Controlled Decentralization

QUESTION: DoD's new policy is to delegate a greater proportion of Systems Acquisition Review responsibility to the individual services. Will this speed up the transition from R&D to the procurement phase? What can we reasonably expect the impact to be on procurement cost growth? Why? Can any example be given of the beneficial effects to date of this new policy?

ANSWER: The delegation of system acquisition responsibilities to the Services includes the responsibility to construct the acquisition strategy and "tailor" it so that the most efficient schedule consistent with resources, risk, and threat urgency is evolved. The objective is to transition from R&D to production as soon as possibly consistent with pertinent factors. The policy specifically provides for delegating responsibility, authority and accountability to the Service Program Managers. Delegation should help curb cost growth as we have placed the responsibility for detecting cost problems and the ability to take corrective action in the hands of the most knowledgeable level of management. Such corrections can be taken immediately within resource constraints. The DIVAD gun appears to be a good example of a successful decentralized program. This program is approaching a production decision and at this point, indications are that cost growth has been contained within 5 percent.

Additional Committee Questions

QUESTION: While these Defense Appropriations hearings have been underway a figure, perhaps mystical, of $5 billion has been cut from the defense budget before its submission to the Congress. Could you please tell me where this $5 billion has been cut from the RDT&E portion of the defense budget? --Particularly what areas of research have been cut?

ANSWER: I must assume that your question refers to our economies and efficiencies package where we delineate areas in which we internally reduced preliminary service budget requests by applying our policy of eliminating marginal programs, reducing travel and consultant levels, consolidating base support functions, and making better use of computer equipment and services. We maintain that these internal efforts led to an FY 1983 budget request which is $5 billion less than it would have been if we hadn't made a concerted effort to eliminate these peripheral and wasteful amounts. About a billion was reduced in R&D spread through all categories of research.

SUBCOMMITTEE RECESS

Senator STEVENS. The subcommittee will stand in recess until Thursday, March 18, at 9 a.m. when we will receive testimony on the fiscal year 1983 Air Force budget overview.

Thank you very much.

[Whereupon, at 11:15 a.m., Tuesday, March 16, the subcommittee was recessed, to reconvene at 9 a.m., Thursday, March 18.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1983

THURSDAY, MARCH 18, 1982

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9 a.m. in room 1114, Everett McKinley Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Andrews, D'Amato, Rudman, Eagleton, and Johnston.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

STATEMENT OF HON. VERNE ORR, SECRETARY OF THE AIR FORCE

ACCOMPANIED BY:

GEN. LEW ALLEN, JR., USAF, CHIEF OF STAFF, U.S. AIR FORCE

MAJ. GEN. MARVIN C. PATTON, DIRECTOR OF BUDGET, COMPTROLLER OF THE AIR FORCE

BUDGET REQUEST

Senator STEVENS. This is the scheduled time to conduct a budget overview of the Air Force appropriation for the 1983 fiscal year.

For the programs funded in the Defense appropriation bill, the Air Force is requesting $75.2 billion. That is an increase of $13.3 billion, or 21 percent, over appropriations to date for the current fiscal year. Outlays now budgeted for fiscal year 1983 total $66.2 billion, an increase of $11.7 billion over current spending estimates—up more than 21 percent from 1982.

The Air Force also has pending before the committee a supplemental appropriation request for fiscal year 1982 requesting nearly $541 million for program increases. The usual supplemental appropriation request to cover pay costs has not yet been transmitted.

COMPARATIVE TABLE

We will ask the Air Force to supply for the record at this point a comparative table of both budget and outlays for the 1982-83 fiscal years. This table should display regular appropriations, supplementals, and contingencies, and changes from 1982 to 1983 should be tabulated by percentage as well as dollar amounts.

[The table follows:]

91-674 O—82——19

BUDGET AND OUTLAY TABLE FOR FISCAL YEARS 1982, 1983

Air Force Total Budget Authority

[Dollars in thousands]

	1982 estimate	1983 estimate	Change	Percent
Mil Per AF	$10,333,714	$12,031,400	$1,697,686	16.4
Reserve Per, AF	295,197	350,900	55,703	18.9
Nat Guard Per, AF	426,067	544,600	118,533	27.8
O&M, AF	16,123,919	17,944,700	1,820,781	11.3
O&M, AFR	669,754	766,300	96,546	14.4
O&M, ANG	1,647,818	1,761,800	113,982	6.9
Acft Proc, AF	14,021,898	17,756,700	3,734,802	26.6
Msl Proc, AF	4,573,950	6,827,900	2,253,950	49.3
Other Proc, AF	5,406,903	5,845,200	438,297	8.1
RDT&E, AF	8,890,710	11,220,400	2,329,690	26.2
Outlays:				
Mil Per, AF	10,302,600	11,961,000	1,658,400	16.1
Reserve Per, AF	288,600	343,600	55,000	19.1
Nat Guard Per, AF	424,500	536,200	111,700	26.3
O&M, AF	16,145,700	17,214,100	1,068,400	6.6
O&M, AFR	662,800	754,600	91,800	13.9
O&M, ANG	1,635,800	1,743,000	107,200	6.6
Acft Proc, AF	9,165,500	12,457,800	3,292,300	35.9
Msl Proc, AF	2,934,300	4,177,600	1,243,300	42.4
Other Proc, AF	3,540,100	4,805,900	1,265,800	35.8
RDT&E, AF	7,969,300	10,197,000	2,227,700	28.0

These amounts do not cover fiscal year 1982 pay raises. The pay supplemental is not included in the fiscal year 1983 DOD budget submission.

INTRODUCTION OF WITNESSES

Senator STEVENS. We welcome you back before the committee, Mr. Secretary and General Allen. We have your prepared statements and they will be printed in full in the record, along with the tables carried in the full posture statement. The posture statement itself will be adopted for the record by reference. If you can summarize your statement—and we hope the summary will include a justification of the sizable appropriations increase that is requested for fiscal year 1983.

OPENING REMARKS OF SECRETARY ORR

Secretary ORR. Thank you, Mr. Chairman. Let me add a word or two in the opening statement in addition to what has been provided. I know the time constraints on the committee.

With me, of course, are the Chief of Staff, Gen. Lew Allen, and Maj. Gen. Marvin C. Patton.

I would like to merely say in preparation for the questions that you have, the status of the Air Force's health today is excellent, and that in large measure is due to the generosity of the Congress in 1980 and 1981.

Very briefly, in recruitment, at this time of the year, we have brought on board approximately 80 percent of all the nonprior service recruits, and of course the fiscal year is not quite over.

Last year we had 88 percent with high school diplomas, this year it is over 92 percent; we are meeting our goal. First-term retentions are up 20 percent; second-term retentions are up 15 percent. The summation of it is that there are three factors that are contributing to this very favorable situation.

First and probably foremost is the consideration which this committee and others gave us on pay. The second one, I cannot avoid noting the lack of economic stimulus which undoubtedly caused people to stay in the service; and third, I think possibly of underlying importance but certainly there is a feeling in this country with respect to those who serve in military uniform, and that is of great help to us in recruitment.

With that and just a very brief statement by General Allen, I think we are prepared to answer questions without taking further of your time.

Senator **Stevens**. Thank you, Mr. Secretary.

[The prepared joint statement of Hon. Verne Orr and Gen. Lew Allen follows:]

OPENING STATEMENT

BY

THE HONORABLE VERNE ORR

SECRETARY OF THE AIR FORCE

AND

GENERAL LEW ALLEN, JR.

CHIEF OF STAFF

Mr. Chairman and Members of the Committee

We are pleased to have the opportunity again to appear before this Committee and to present, for your consideration, the FY 83 Air Force Program. It is an affordable program developed to sustain the momentum of last year's actions and to restore to this nation the military capability required to maintain our security. We are also happy to report that in the year since our last appearance before this Committee, the Air Force has progressed toward a more capable and resilient force, better able to meet the numerous challenges and threats presented by the tremendous buildup in Soviet military power and the accompanying expansionist Soviet foreign policy. As a direct result, our nation is, today, moving toward a more secure future.

In short, I believe that we are "turning the corner" away from years of neglect of our defense needs. The program we present today and which is detailed in the Posture Statement that we are now tabling, is one which General Allen and I support fully and consider vital if the progress made during the past year is to be continued into the future. In a very real sense, this progress is a direct result of the efforts of this Committee. We speak for every man and woman in the Air Force when we say that we are most grateful for your continuing support.

Before we address the particular questions and concerns of the Committee, we would like to present a brief overview of our FY 83 budget, identifying the programs and issues we consider most significant. The Air Force Budget for FY 83, which requests obligational authority of $78.4B, was developed through a thorough and deliberate process and reflects the following prioritization.

The first priority in developing the Air Force Budget and, therefore, the one which we consider most significant is people. The reason is fundamental. The combat capability and, thus, the deterrent value of the Air Force depends on having adequate numbers of highly qualified, motivated and technically competent people--military and civilian, active and reserve. During the past year, significant progress has been made in recruiting and retaining people. For FY 81, the Air Force set a target that 88 percent of the recruits with no prior military experience should be high school graduates and that target was achieved. In the area of retention, we are likewise encouraged by the progress made.

Enlisted second term and career reenlistment rates are up over the previous fiscal year. Retention among pilots and engineering officers has increased. In addition, fewer people are retiring voluntarily. However, the gains that we have made are tenuous. Our recruiting and retention successes are largely untested in a strong economy with low unemployment rates.

We know that the recruiting function will become more difficult in the future as a result of the decline in the number of young men and women eligible for service. The number of 18-year-old males eligible for military service will decline by 14 percent by 1986 and by as much as 22 percent by 1992. This will occur at the same time that countering an increasingly sophisticated threat will require more highly qualified people. The problem therefore is not only quantity, it is also quality.

Another area of concern that must be addressed is the quality of life in the Air Force. We take pride in saying that, "The Air Force is a great way of life." The challenge, however, is to ensure that it continues to be so. Our program is designed to do just that. We need to do such things as build base-level Family Support Centers to consolidate base/community support activities; upgrade the quality of military family housing by constructing new homes and by renovating existing ones; upgrade the quality of dormitories and BOQs; bring the standards of work and office facilities up to that common in the civilian business community; improve enlisted dining facilities; and modernize transient facilities for accompanied and unaccompanied personnel.

The FY 83 program that we present to you today is focused on addressing those needs and challenges. Sixteen percent of our budget is dedicated to military personnel costs and an additional one percent is directed to construction of military family housing.

Our second priority and the paramount need with respect to military hardware is strengthening our strategic nuclear forces in order to redress the strategic imbalance and deny the Soviet Union any prospect of victory in a nuclear conflict.

The comprehensive strategic modernization program set forth by President Reagan last fall is designed to fulfill these objectives. We must proceed with it quickly; we must proceed with it resolutely. There must be no doubt in the minds of our foes and friends alike that we have the determination and capacity to match the Soviets in strategic strength, both to deter Soviet aggression and coercion and to provide a sound basis for the negotiation of equitable agreements to reduce strategic arms. Arms limitation negotiations can succeed only if we can bargain from a position of strength. Without a vigorous US strategic modernization effort, the Soviets would have little reason to negotiate toward meaningful reductions in our respective nuclear arsenals.

We have embarked on a three-fold program to rebuild our bomber forces. We will be increasing procurement of air-launched cruise missiles (ALCMs), fielding 100 B-1B bombers in the latter half of this decade, and pursuing vigorously the development of an advanced technology bomber.

We have begun to deploy ALCMs on B-52Gs. This program is on track and proceeding well. Our first ALCM-equipped aircraft achieved alert capability on schedule last September, and the first ALCM-equipped squadron will be operationally ready this December.

With last fall's Congressional approval of the B-1B program, we are moving out smartly to bring this vital program in on time and within cost. We are confident we will meet the cost goal of $20.5 billion in FY 81 dollars we have set for the B-1B program and have instituted extraordinary management procedures to that end. We have signed contracts with Rockwell for production of the initial aircraft and will sign contracts this month with General Electric for the first lot of engines. Our first B-1B squadron will enter operational service on schedule in 1986.

The B-1B will incorporate advances in design and avionics that will make it highly survivable against both existing and projected threats. It will include a combination of techniques to reduce its radar cross-section by a factor of one hundred below that of the B-52 and will include the latest developments in electronic countermeasures. From our continuing analysis, we remain confident that the B-1B will be able to penetrate Russian air defenses and strike targets throughout the Soviet Union well into the 1990s.

We are also proceeding with the development of the Advanced Technology Bomber and are determined to bring it on board at the fastest reasonable pace. We recognize that it is essential for us to deploy an advanced bomber that is effective across a range of combat applications and is durable and maintainable as well. We are confident our program will meet these objectives. And, if technology and our development efforts permit, we will do our best to accelerate this important program.

In addition to rebuilding our bomber fleet, we must improve the survivability and capability of our land-based ICBMs -- the centerpiece of our strategic deterrence and defense capability.

With our FY 1983 budget request, we will complete the development of the M-X and fund production of the first nine missiles. Our first flight test is slated early next year, leading to an initial operating capability in 1986. Deployment of the M-X will begin to alleviate the asymmetries in ICBM capabilities that have developed in recent years as the accuracy and number of Soviet warheads have markedly increased.

As the Committee is aware, developing and reaching agreement on a long-term survivable basing mode for M-X has proved difficult. We are engaged in an aggressive R&D effort to develop more survivable basing modes. We are examining Deep Basing, Continuous Patrol Aircraft and Ballistic Missile Defense Basing alternatives, with the aim of reaching a long-term basing decision in 1983. In the interim, we will deploy a minimum of 40 M-X missiles in existing Minuteman silos.

Though not a lasting solution to growing ICBM vulnerability, initially deploying M-X in silos will complicate and add uncertainty to Soviet attack calculations. More importantly, it is a needed early step toward countering Soviet ICBM capabilities. With greater accuracy and more than three times as many warheads as our newest Minuteman missiles, the M-X will be able to destroy high value Soviet targets such as hardened command posts, nuclear storage sites and missile silos. It will thus confront the Soviets with some of the vulnerability problems that their heavy, accurate SS-18 and SS-19 ICBMs present to us.

Approximately ten billion dollars are dedicated to the M-X, B-1B, and Air Launched Cruise Missile programs in our budget.

While we must, as a matter of urgency, rebuild our nuclear deterrent, we must also continue to improve our general purpose forces. With Soviet conventional capabilities steadily expanding, it is imperative that our conventional forces have the capability to deploy and employ effective fighting power rapidly. Accordingly, our FY 83 budget continues the priority emphasis of the preceding two budgets on enhancing the readiness and sustainability of our tactical and airlift forces.

This money will be used to increase tactical flying hours by eight percent, bringing the average flying hours per pilot up to about 18 hours per month compared to less than 15 in 1980. In addition, we are continuing our aggressive program to improve the quality and realism in our operational training. With our FY 83 request, we will: 1) eliminate the long-standing backlog in depot purchased equipment maintenance, 2) fully fund both peacetime and initial war reserve spare parts for our tactical forces, and 3) achieve full wartime operating capability for our strategic airlift aircraft by FY 86. In fact, twenty-six percent of our budget or $20.5B is dedicated to the operations and maintenance of our existing forces. Over the five-year program period, we will invest nearly $20 billion to upgrade our munitions inventory in order to bring our stocks up to the levels required to fight and win a prolonged conventional conflict.

Our fourth budget priority addresses the need to improve our mobility assets. Improved mobility is absolutely essential if we are to bring US military power to bear in distant regions with the speed dictated by the nature of modern warfare and to sustain effective combat.

In light of the urgent and compelling need to be able to transport large quantities of equipment and supplies over intercontinental distances, we have modified our earlier airlift plans which would not have provided the needed increases in airlift capability before the end of the decade. We plan to take advantage of a favorable contract option in procuring 44 additional KC-10s which can both refuel our deploying fighters and transports and carry cargo, thus enhancing our rapid deployment capabilities. And, to increase our capability to transport large volume cargo, particularly "outsize" equipment such as self-propelled artillery and helicopters, we will be acquiring 50 new C-5Bs, an improved version of the C-5As, in our present airlift fleet. With no research and development required and with an existing production base, we will be able to field C-5Bs in the middle of this decade; well before a new production aircraft would be available. When this new program is carried out and the modifications to present C-141s and C-5As are completed, we will have an airlift capacity which will approximately double our present capability. Air Force mobility funding totals $4.96 billion in FY 83.

Finally we are continuing to modernize and expand our tactical air forces. This year about 10% of our budget, some $7.58 billion, is dedicated to this area. The new generation of fighters introduced into our tactical forces in recent years, the F-15, F-16 and A-10, have proven to be highly capable, reliable, and maintainable. Through a series of evolutionary improvements, we plan to enhance the capability of these aircraft in the future to meet an increasing Soviet threat. One particularly critical capability that we need to field is the ability to attack enemy ground forces at night and in adverse weather.

Our budget this year will continue to procure F-15s, F-16s, E-3As, and TR-1s and completes the planned buy of the A-10. Because of our emphasis on improving the readiness and sustainability of existing forces, our procurement of tactical aircraft in FY 83 is lower than what we need to modernize and gradually expand our fighter force. We plan to increase the rates of tactical fighter procurement to more efficient levels in the years ahead in order to reach our objective of 40 tactical fighter wings in FY 86 and to build toward a force of 44 wings by 1990 while maintaining an average fighter's age of approximately 10 years.

In conclusion, let it be noted for the record that in the past year we in the Air Force and this Congress have made significant progress toward restoring the defense capability of this nation. The FY 83 Air Force Budget builds upon that effort, for much still must be done.

To be sure, TOA build-up is rapid in the FY 82-84 period. But due to long lead times for many systems being procured, significant budget outlays will not occur until FY 85 and beyond. The programs we have outlined and the budget that we have submitted are needed to meet the challenges this nation faces. The Air Force looks forward to working with you this year as we have in the past to address these challenges.

Thank you.

TABLE A

Soviet Military Production

	1976	1977	1978	1979	1980
ARMY MATERIEL					
Tanks	2,500	2,500	2,500	3,000	3,000
T-55	500	500	500	500	--
T-64	500	500	500	500	500
T-72	1,500	1,500	1,500	2,000	2,500
T-80				Trial Output	Trial Output
Other Armored Vehicles	4,500	4,500	5,500	5,500	5,500
SP Field Artillery	900	950	650	250	150
Field Artillery	900	1,300	1,500	1,500	1,300
Multiple Rocket Launchers	500	550	550	450	300
SP AA Artillery	500	500	100	100	100
Towed AA Artillery	500	250	100	—	—
Infantry Weapons (Thousands)	250	350	450	450	400
NAVAL SHIPS					
Submarines	10	13	12	12	11
Major Combatants	12	12	12	11	11
Minor Combatants	58	56	52	48	52
Auxiliaries	4	6	4	7	5
MISSILES					
ICBMs	300	300	200	200	200
IRBMs	50	100	100	100	100
SRBMs	100	200	250	300	300
SLCMs	600	600	600	700	700
SLBMs	150	175	225	175	175
ASMs	1,500	1,500	1,500	1,500	1,500
SAMs	40,000	50,000	50,000	50,000	50,000
ATGMs	30,000	35,000	35,000	40,000	50,000
AIRCRAFT					
Bombers	25	30	30	30	30
Fighters/Fighters-Bombers	1,200	1,200	1,300	1,300	1,300
Transports	450	400	400	400	350
Trainers	50	50	50	25	25
ASW	5	10	10	10	10
Helicopters	1,400	900	600	700	750
Commo/Utility	125	100	100	100	100

TABLE B

AIR RESERVE FORCES CONTRIBUTION TO TOTAL FORCE FY 1983

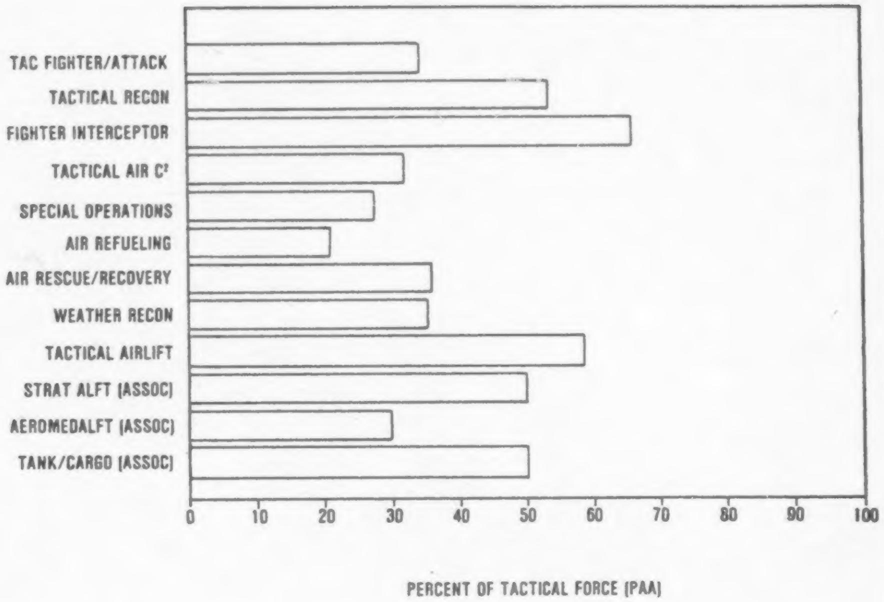


TABLE C

Total Obligational Authority (TOA)
(Millions of $)

	FY 81	FY 82	FY 83
RDT&E	7,133	8,876	11,220
Procurement			
Aircraft	10,298	14,022	17,757
Missile	3,333	4,574	6,828
Other	3,148	5,407	5,845
Military Construction	1,049	1,773	2,224
Military Personnel	10,576	11,055	12,927
Operation and Maintenance	16,860	18,441	20,473
Stock Fund	28	79	161
Family Housing*	0	0	938
TOA	52,425	64,227	78,373
Legislative Contingencies	0	1,526	1,131
Total TOA**	52,425	65,753	79,504

*Family Housing included in TOA effective FY 83.
**Totals may not add due to rounding.

TABLE D

**APPROPRIATION
PERCENT OF TOA
(THEN YEAR DOLLARS)**

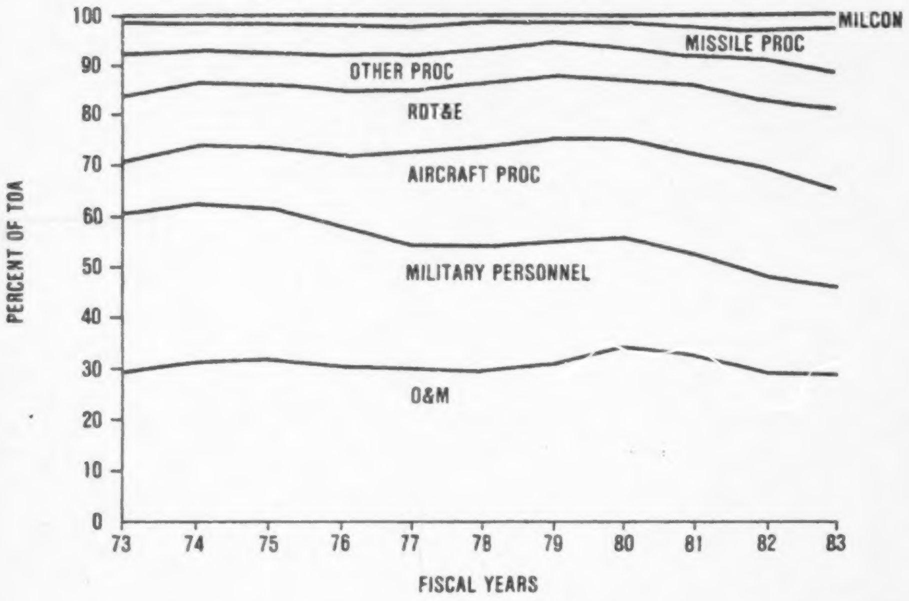


TABLE E

Personnel End Strengths
(In Thousands)

	FY 81	FY 82	FY 83
Active Duty Military	570.3	580.8	600.0
Civilian			
Direct Hire	232.9	234.3	230.2
Indirect Hire	13.2	13.4	13.1
Selected Reserve			
AFR	61.6	63.7	66.6
ANG	98.3	100.1	101.8

Personnel Costs
(Millions of $)

	FY 81	FY 82	FY 83
Active Duty Military	9,913	11,578	12,031
Civilian	5,327	5,493	5,754
Selected Reserve			
AFR*	277	328	351
ANG	386	480	545
AF Total	15,903	17,879	18,681

*Excludes ROTC and Health Professions Scholarship Programs which are not included in the Air Force Reserve program.

TABLE F

Selected Key Programs
(Millions of $)

	RDT&E	PROC	FY 83 (QTY)**	TOTAL
Aircraft (3010) (3600)				
B-1B	754	3,868	(7)	4,622
A-10	6	357	(20)	363
F-15	125	1,602	(42)	1,727
F-16	86	1,959	(120)	2,045
E-3A (AWACS)	79	166	(2)	245
TR-1	0	157	(4)	157
B-52 (Mods)	122	555		677
KC-135 (Reeng)	29	490		519
C-5 (Wing Mod)	7	190		197 ***
C-5B	0	800	(2)	801
KC-10	0	790	(8)	790
Missiles (3020) (3600)				
ALCM	187	665	(440)	852
GLCM	29	520	(120)	549
M-X/Adv Tech	2,759	1,446	(9)	4,205
AIM-7/9	-	314	(3,220)	314
IIR Maverick	5	343	(2,560)	348
Space Systems (3020) (3600)				
NAVSTAR GPS*	123	102		225
Space Shuttle	356	136		492
DSCS	53	193		246
AFSATCOM	51	29		80
Def Sup Prog	120	649		769

* Includes space, control, and user equipment segments.

** Procurement cost excludes initial spares.

*** Plus $97 million in O&M for kit installation.

TABLE G

Research, Development, Test and Evaluation (RDT&E) by Category

(Millions of $; funds in parentheses show funding for selected major systems)

	FY 81	FY 82	FY 83
STRATEGIC PROGRAMS	2,720	3,579	4,972
B-52 Squadrons	(122)	(96)	(122)
ASMS	(97)	(100)	(50)
ALCM	(109)	(104)	(187)
AFSATCOM	(26)	(80)	(51)
M-X	(1,492)	(1,963)	(2,759)
MM Improv (Incl MK-12A)	(53)	(20)	(13)
B-1B	(260)	(471)	(754)
TACTICAL PROGRAMS	1,449	1,752	2,201
GLCM	(108)	(80)	(29)
CASWS	(47)	(25)	(5)
F-16	(42)	(57)	(86)
AWACS	(62)	(52)	(79)
INTELLIGENCE AND COMMUNICATIONS	975	1,321	1,436
Defense Sat Comm System	(35)	(40)	(53)
NAVSTAR GPS	(126)	(165)	(123)
TECHNOLOGY BASE	614	621	707
ADVANCED TECHNOLOGY DEVELOPMENT	284	373	472
MANAGEMENT AND SUPPORT	1,092	1,231	1,432
Space Shuttle	(246)	(266)	(356)
Space Booster	(29)	(19)	(15)
TOA*	7,133	8,876	11,220

*Totals may not add due to rounding.

TABLE H

Missile Procurement
(Number of missiles in parentheses)
(Millions of $)

	FY 81		FY 82		FY 83	
Minuteman, Titan and C^3		140		111		0
M-X					(9)	1446
GLCM	(11)	148	(54)	328	(120)	520
ALCM	(480)	579	(440)	605	(440)	735
Sidewinder	(1280)	102	(1800)	132	(1920)	115
Sparrow	(1050)	177	(1025)	211	(1300)	199
Maverick			(490)	231	(2560)	343
HARM			(136)	89	(206)	160
Rapier		90		139		99
Target Drones		2		17		40
Modifications		113		81		160
Spares & Repair Parts		158		210		274
Space Programs		530		841		1297
Special Programs		1312		1572		1484
Industrial Facilities		19		25		27
TOA*	(2976)	3333	(3945)	4574	(6555)	6828

*Totals may not add due to rounding.

TABLE I

Aircraft Procurement
(Number of aircraft in parentheses)
(Millions of $)

	FY 81		FY 82		FY 83	
B-1B			(1)	1622	(7)	3868
A-7	(6)	103				
A-10	(60)	532	(20)	230	(20)	357
F-5	(0)	7	(3)	23	(3)	29
F-15	(42)	952	(36)	1103	(42)	1602
F-16	(180)	1853	(120)	1879	(120)	1959
MC-130H				27		0
KC-10A	(6)	312	(6)	335	(8)	790
C-5B				270	(2)	800
E-3A (AWACS)	(2)	243	(2)	244	(2)	166
TR-1	(4)	98	(5)	114	(4)	157
C-130H	(6)	69	(8)	110		
EDS					(2)	5
UH-60A	(5)	27	(6)	33		
ALCA/ARIA Control Acft	(7)	24				
Modifications		1865		2115		2600
Aircraft Spares & Repair Parts		2710		3899		3657
Support Equip & Facilities		1502		2019		1767
TOA*	(318)	10298	(207)	14022	(210)	17757

*Totals may not add due to rounding.

TABLE J

Other Procurement
(Millions of $)

	FY 81	FY 82	FY 83
Munitions and Associated Equip	344	1,081	854
Vehicular Equipment	158	331	350
Electronics & Telecommunications	709	1,105	1,427
Other Base Maint & Support and Selected Activities	1,937	2,889	3,213
TOA*	3,148	5,407	5,845

*Totals may not add due to rounding.

TABLE K

Operation & Maintenance
(Millions of $)

	FY 81	FY 82	FY 83
Strategic Forces	2,876	3,193	3,085
General Purpose Forces	3,220	3,597	3,833
Intelligence & Communications	1,005	1,150	1,417
Airlift	1,045	1,179	1,202
Central Supply & Maintenance	4,689	4,891	6,034
Training, Medical and Other	1,548	1,763	1,978
Administration & Assoc Activities	354	342	389
Operation & Maintenance/ Guard & Reserve	2,118	2,318	2,528
Support of Other Nations	5	8	7
*TOA	16,860	18,441	20,473

*Totals may not add due to rounding.

OPENING REMARKS OF GENERAL ALLEN

Senator **Stevens**. Good morning, General Allen.

General **Allen**. Good morning, Mr. Chairman.

I am pleased to be here and I want to emphasize that the budget submission and posture statement that we have made represent complete agreement between the Secretary and myself with regard to the priorities and requirements for those funds and programs that we request.

The program that we have submitted, I believe, has been thoroughly scrubbed in following the fiscal guidance of the President and represents the 1983 program which is a coherent part of those activities that took place as a result of the 1981 supplement and the 1982 amendment to begin the process of correcting those longstanding and serious deficiencies which we all recognize existed within the Armed Forces.

Those deficiencies needed to be corrected with urgency, and in a program which is characterized by high competence and efficiency, and a program that must continue to be supported by the American people because the reality of the threat is all too apparent.

Because I believe we are approaching what is truly a dangerous decade for the United States due to the growth in Soviet military capability and the unstable conditions in many of the areas of confrontation which unfortunately exist, because of that, we have elected at many points throughout the budget to select those approaches which give us a very high competence and near-term capability, and increase our fighting capability with a sense of real imminence of danger.

We have therefore, I think, developed a sound program, a balanced program for this dangerous decade. It is a program in which the priorities are straight as far as we are concerned, consistent with what we did in the 1982 amendment and the 1981 supplement, to start on this major course of action and one which I think is extremely important to maintain.

It is the right course, it is a course which, when properly applied, will provide a defense of this country if we maintain our resolve and our determination to stay with that.

As Mr. Orr has said, in the priorities we have assigned these matters, people override our considerations and we are extremely pleased with the status of the people in the Air Force. I only wish to add to his comments two points.

MORALE OF AIR FORCE PERSONNEL

One is that the morale of the people in the Air Force is very high at the present time. And two, the quality of those people is very good. We are short some experience levels in various organizations due to the losses we had a year or so ago, but those are filling in again as our retention rates are up. The quality of new people coming in is very high, and we are very satisfied with the status of people.

STRATEGIC MODERNIZATION PROGRAM

The next priority that we assigned in this budget is the strategic modernization program. And that of course was formulated as part of the President's coherent and comprehensive review of strategic matters and represents a significant emphasis on several major programs which include the B-1B, the advanced technology bomber, the ALCM program, the MX program, major emphasis on C^3, and the beginnings of some greater attention of strategic defense matters.

READINESS AND SUSTAINABILITY

The next priority we assigned to this budget, which continues what we did in the 1981 supplement and the 1982 amendment, was a major emphasis on readiness and sustainability. We have focused on improving the status of war reserve materials, and particularly spares and ammunitions, and applied more training flying hours to our crews as well as we are able to up the level of combat readiness of those crews in the demanding situations we have been placed. And we have in this program accommodated and corrected many of these long-standing deficiencies.

The full effect of those corrections will not be felt until the procurement lead times have expired. Many of these did not start until the 1981 supplement. But we are fast getting these needed spares and munitions; some of them are beginning to be delivered and more will be present quickly.

We have made a major approach to correcting what has been a very serious shortage in our ability to deploy forces, and that is our strategic airlift capability.

RAPID DEPLOYMENT FORCES

The rapid deployment of forces is a critical requirement for the United States, and is one in which the Air Force, of course, has a major responsibility, along with sealift and prepositioning, to address. We recognize that shortage and our inability to meet time lines associated with NATO, and we are more directly focusing our attention, as a result of the requirements for rapid deployment, to Southwest Asia.

The improvement in the airlift situation is contained in the 1983 bill and is a major decision which represents emphasis on getting that capability quickly and competently into the system.

We continue with the emphasis on bringing into the tactical air forces the equipment which they need to fight the war against Soviet first-line aircraft, mainly characterized in Europe but also in the kinds of situations which we might face in Southwest Asia or indeed elsewhere as the Soviets continue their major export of first-line aircraft.

We are on the right track, and have to continue on this track. We cannot afford, in the interest of the security of the country, to do less.

Thank you, Mr. Chairman.

Senator Stevens. Thank you, General Allen. General Patton, do you have anything to add?

General PATTON. No, sir.

MILITARY PERSONNEL COSTS

Senator STEVENS. Mr. Secretary, your statement indicates that 16 percent of your budget is for personnel cost; is that right?

Secretary ORR. I have that figure in mind, but that would seem to be somewhat low. We run about 37 percent for O. & M. and military personnel appropriations.

General PATTON. It is generally right around 50 percent. It is down to about 43 percent.

Senator STEVENS. On page 2 of the summary it says:

> We are addressing those needs and 16 percent of our budget is dedicated to military personnel cost, an additional one percent for construction of military family housing.

Secretary ORR. If you are reading it, sir, it is my word and I apologize. I had in my mind something higher.

Senator STEVENS. What is the right figure, General?

General PATTON. The total obligational authority for military personnel in fiscal year 1983 is $12.9 billion; for operation and maintenance it is $20.5 billion.

Secretary ORR. So, it is $12.9 billion approximately.

Senator STEVENS. I cannot hear you.

Secretary ORR. I beg your pardon. The $12.9 billion figure would be in my head approximately 16 percent of the total obligational authority requested. So, apparently the figure is correct and I stand wrong.

Senator STEVENS. What is it in outlays, General?

General PATTON. The outlays are almost 100 percent. We have O. & M. outlays in the first year at about 98 percent.

Senator STEVENS. I realize that, but what in the percentage of your total outlays is military cost, military personnel cost?

General PATTON. The 16 percent, sir.

Senator STEVENS. That is outlays?

Secretary ORR. I see what you mean, outlays as compared to total outlays. Just a moment.

Senator STEVENS. For 1983, what is the military personnel cost compared to the total outlays?

I think that is a confusing number, Mr. Secretary. It would be helpful if you would give us the total military personnel cost, not just pay but the cost of maintaining the military personnel as opposed to civilian personnel. What is that military cost as a percentage of total outlays? I know you must have it.

Secretary ORR. Yes, sir.

[The information follows:]

PERCENT OF MILITARY PERSONNEL COSTS IN TOTAL OUTLAYS

Air Force military personnel cost compared to total outlays based upon the military personnel appropriations for the active forces, Air Force Reserve and the Air National Guard, is 19 percent. The difference between 19 percent and 16 percent cited earlier is due to the use of outlays rather than total obligation authority (TOA) in the calculations. Both include such costs as pay, allowances, bonuses and permanent change of station but do not include DOD appropriations such as Military Retired Pay or Defense Family Housing.

NEWSPAPER ARTICLE ON STEALTH PRODUCTION

Senator **Stevens**. Just to start things off, I have been noticing a lot more prominence about classified matters. My attention was called to some comments in the Army Times about Stealth production. It is interesting to pick up a military newspaper. You read more in the newspaper than you give us in a budget briefing, Mr. Secretary.

Can you tell us how this happens to get out in such details as far as the Stealth is concerned?

Secretary **Orr**. No, sir, I cannot tell you. I can only assure you that the leaks are a very deep concern not only in the Air Force but within the Department of Defense. As you read in the newspaper, the Deputy Secretary of Defense subjected many persons to lie detector tests in an attempt to find out the source of those leaks, and to encourage—that is a very mild word, "encourage"—those who might have been guilty to cease and desist.

Senator **Stevens**. We are going to have a hearing on B-1 and the ATB, and we will be going into it at that time.

But the Army Times seems to know a lot more about what is going on there than we do. I would appreciate it if you gave us a comment on that article. If it has to be classified, so be it. But there are some developments there that might have an impact on our consideration of your B-1 request.

Secretary **Orr**. That article does not relate to a bomber.

Senator **Stevens**. I understand that. It does have to do with Stealth technology.

Secretary **Orr**. Yes, sir, very definitely.

ALLIED FORCES AND SUPPORT FACILITIES

Senator **Stevens**. In your statement you made a point that the task of countering Soviet aggression is complicated by an absence of substantial allied forces and limited support facilities.

Could you expand on that? Where is it you are talking about where you had a lack of allied forces and support facilities?

Secretary **Orr**. May I ask General Allen to comment?

General **Allen**. Of course, the primary concern relates to the preparation for contingencies that might occur in Southwest Asia where the infrastructure for U.S. operations is clearly very severely limited, and where there is a political environment in which creating a stronger infrastructure is limited.

We have taken a number of steps—and some of them are reflected in this budget—to obtain improvements in this area.

In addition, in Europe there continue to be issues which are addressed within NATO and by the United States with its NATO Allies with regard to the support that we can achieve and the assistance that we can achieve from our NATO Allies.

For example, one of the serious limitations to the Air Force deployed forces is the status of essential facilities at collocated operating bases.

Senator **Stevens**. What kinds of bases?

General **Allen**. These are called collocated operating bases. They are bases which are, for example, in Germany being used by the

German Air Force at the present time, but into which, in time of war, we would move in substantial U.S. forces.

It is required, that to those bases, we add fuel, munitions storage, and the like to permit wartime operation. We have made great progress in working with NATO to identify those bases and have reached the necessary agreements with regard to improving the capabilities of those bases.

We have had less success in getting them adequately funded early enough within the NATO infrastructure funding to permit us to make the progress that we want. We had difficulty with Congress in obtaining authority for prefinancing of those activities.

So, those represent another example of where there are limitations caused by the host nation difficulties. Recently, as I think you are aware, a major negotiation was acccomplished with the Germans in terms of host nation support associated with wartime activities which is considered very beneficial to the United States overall. It does not help the Air Force, but it is considered to be a major improvement in this area.

Senator STEVENS. The German Government asked some of us to come over for the signing of the agreement, but it is my understanding that is strictly a wartime host nation agreement; is that right?

General ALLEN. Yes, sir, that is correct.

HOST NATION PEACEKEEPING ROLE

Senator STEVENS. What about the facilities that are there now in terms of the peacekeeping role we have?

General ALLEN. We have various agreements with the host nations in which they provide various kinds of support. In general, my own view of that is that we are in a better situation there than we are with regard to wartime support. Wartime support is what we need, and we continue to make progress and continue to put pressure on our allies for greater help.

Senator STEVENS. What about the host nation facilities for peacetime, are they maintaining those, providing the facilities that are needed? Are they meeting their role of NATO and other support they are committed to?

General ALLEN. Yes, sir. We have agreements with the countries and there are sharing agreements in that as to what are the responsibilities of each country. My general impression is that those are satisfactory and the host nations are meeting their obligations.

Senator STEVENS. We will have a hearing on the NATO forces at a later time. But the question is phrased in terms of what is our whole commitment to Southwest Asia. Is that commitment affordable and doable in the sense of the Air Force to maintain a commitment like that without a host nation or area, regional area, support for the Air Force in Southwest Asia?

General ALLEN. Clearly, in the event of war we have to have bases from which to operate aircraft. The difficulty that we face is to make the proper preparations during peacetime, when there are great political sensitivities, that will give us the assurance of operating in war.

Those agreements have been hard to come by. Nevertheless, as we have examined the physical characteristics of the facilities in the area and continue to work on such questions as the maritime prepositioning of equipment in those places where we can, we are beginning to make major improvements in our ability to deploy those forces and sustain them.

It is not as good, clearly, as our capability is in NATO where we have a long-standing alliance and a substantially developed infrastructure to support a rapid buildup of wartime capability. But we have over the last year made significant improvements and I believe we must continue to make those.

NATO ASSISTANCE IN SOUTHWEST ASIA

Senator **STEVENS**. My last question is—and then I will yield to my colleague—we get 30 percent of our oil from Southwest Asia, Europe gets 90 percent of theirs. Are the NATO countries assisting in any way in terms of the Southwest Asia activities that we are involved in?

General **ALLEN**. They are assisting in minor ways, but significant ways.

Senator **STEVENS**. Percentagewise, in terms of support in dollars.

General **ALLEN**. Low, but in general the U.S. policy as I understand it, sir, has been and as a matter of fact as I would encourage it to be, that as we have been obliged to focus additional attention on Southwest Asia, we need to ask the NATO Allies to pick up greater responsibilities for the defense of Europe.

Senator **STEVENS**. Have they done that?

General **ALLEN**. It is clear that we are not fully satisfied with the extent to which they have done that. They have done some, the host nation agreement in Germany is an example of that. So are the actions of the United Kingdom, they have been very supportive.

But clearly, the United States must have a continuing policy of expecting its allies to join it in the major efforts required to improve our fighting capabilities against the Soviet Union.

Senator **STEVENS**. It appears to me that the last illustration was that a conventional force was developed for Southwest Asia without any consultation with Congress. This committee is going to reexamine that this year in light of the NATO commitment.

Mr. Rudman.

Senator **RUDMAN**. Thank you, Mr. Chairman.

COST OVERRUNS

Secretary Orr, General Allen, on February 8 you submitted to our chairman in accordance with the new reporting provisions of Public Law 97-86 a number of substantial cost overruns that exceeded baseline estimates by more than 15 percent, and in fact more than 25 percent in the R. & D. area.

The items were Maverick, F-15, which was more like 25 percent, F-16; unit costs up by more than 25 percent. The AIM 7M, which is a program with the Navy, by more than 25 percent; A-10, up by more than 25 percent. The Defense Satellite Communications System, up by more than 25 percent.

I guess my question is—and I have read the explanations contained in each of the submissions—my question is, do you believe that your report that we are going to get in the next quarter is going to be any better than the one we got this quarter and if so, why?

Secretary **Orr**. First, let my say on the F-15, F-16 and the A-10—I withdraw them in part from the others—but I make no proud statement of the performance we have had in cost. I would not, at this point, want to promise you that the next report will be better.

I can assure you that it is with anger and embarrassment that we submit those reports, that is nothing we are proud of. There is something in every one of them that we in the Secretariat and the blue-suit Air Force at the top levels are working to try and overcome.

We have instituted and are continuing to institute a number of measures to try and correct it. I am as unhappy, or more so, than you because I not only come before you with those, I go before the Secretary of Defense with them and I do not like to be down there.

UNIT COST GROWTH OF F-15 AND F-16

Senator **Rudman**. Mr. Secretary, let us move on to your current budget and examine something in that budget which I believe may be heading us in that direction again.

You are planning to compete on advance development versions of both the F-15E and the F-16—I believe the 16—XL—for a dual role fighter deep interdiction mission, to try and obtain mix of missions between those two aircraft.

It sounds a little reminiscent of the problems we have seen with the FA-18. Of course, that is not your program but they have similarities, they both fly; they are both jet fighters.

We have seen an enormous cost growth in that area beyond anyone's comprehension. I wonder whether or not you have looked at the F-18 in terms of the experience with the F-15 and the F-16. If they are different, I would like to know why.

Secretary **Orr**. They are different, they are very different. At first, you have not had that cost growth in the F-15 and F-16. The cost growths which are shown there are basically driven by tremendous increases in the numbers of aircraft we intend to purchase.

Senator **Rudman**. I am talking about the unit cost, Mr. Secretary. Theoretically, the more you buy the lower the cost, at least that is what you tell us.

General **Allen**. Certainly, format of the report requires us to enter into future buys in a way which has the following characteristics, that is, you add them at the end of the program each year, where the inflation has built all the way up. In the case of the F- where the inflation has built all the way up. In the case of the F-15 and F-16, the vast majority, in the increase of the unit cost, is with the format, additional buys in the outyears. There is basically, in the case of the F-15, no increase in the unit cost of the aircraft.

Senator **Rudman**. I understand that, but I think my question is more directed at your plans now to compete with an advanced development version. I wonder whether you are not asking for the same kind of trouble the Navy had with the F-18, or have you learned from their experience?

General ALLEN. We have learned from their experience, sir. Let me explain that just a little bit.

We are satisfied, very well satisfied with the F-15 and F-16, that is, the aircraft are performing extremely well. The maintenance records are very good. We have worked through some of the early durability of engine problems in a way which is fairly satisfactory, and have improved the competitive situation there a great deal.

So, we have a lot of confidence in these aircraft. We have, as a matter of fact, deferred any plans for new generations of aircraft for some time in the future.

What we have concluded is that we do need better deep interdiction capability than we presently have. What we have decided is, the way to get that is through evolutionary kinds of changes in either the F-15 or the F-16.

The F-15E is simply adding some avionics, terrain-following radar, for example, to the F-15.

In the F-16, we are taking advantage of a contractor-sponsored development of a thing called the F-16XL, as you mentioned, which is a new wing on the F-16. If that part of it works out, it will allow us to then look at that aircraft with better avionics to compete against the F-15E. The main point there is to again get a competitive environment with as much of that engineering being very high competence engineering.

So, we have chosen a course of action, deferred new design fighters, and have chosen one which relates to modifications of in-production fighters. We determined to keep those fighters at as high production rates as we can without introducing new aircraft, and make these kinds of evolutionary changes.

Senator RUDMAN. Well, that sounds like a reasonable conclusion. I hope next year's costs are essentially on target.

CONTINUOUS PATROL AIRCRAFT R. & D.

Let me just move on briefly in the small amount of time we have to, how much money do we have in this budget for continued R. & D. in the continuous patrol aircraft?

General ALLEN. In the fiscal year 1983 budget there is, I believe, $74 million.

Secretary ORR. Senator, it is $74 million. However, as you are well aware, there is $10 million in the 1982 budget which is frozen.

Senator RUDMAN. I am well aware of that. Obviously, a decision in terms of MX employment could terminate that program very quickly. Is that an accurate statement?

Secretary ORR. There will be a decision by the Department of Defense in July of next year, and if the decision is contrary to the continuous patrol aircraft I see no reason to spend another dime on it.

Senator RUDMAN. My question is based on earlier hearings we have had with other services on similar projects. They say they are in a contractual position. If in fact the decision is made to continue this patrol aircraft, it will not be utilized as an MX carrier, then we will be in a position of quickly terminating this program and not just have millions of dollars continue to trickle out in cleanup costs. That is the question.

Secretary ORR. Let me check with the General. To the best of my knowledge we are not in a contractual position or an experimental, or an R. & D. position for dollar amounts.

Senator RUDMAN. At this point you bring this new request in, and again, whether or not that money is frozen or not, I am looking now out 6 months. I wonder if General Allen could respond.

General ALLEN. You are quite correct, we will conduct the activities as well as we are able, such that when that decision is made, we focus the attention on the selected solution. We are well aware of Congress' direction for us to do that in 1983, and we will tailor the programs accordingly.

Senator RUDMAN. I raise it because I feel that that will be discontinued. From all that I have seen and heard it would be a shame to have millions of dollars invested and then have another additional millions of dollars invested to terminate the program because of the investment by a contractor.

Thank you, Mr. Chairman.

Senator STEVENS. Senator D'Amato.

Senator D'AMATO. Thank you, Mr. Chairman.

GAU-8 GUN SYSTEM

General Allen, I wonder, given the fundamental role that the A-10 plays in the critical stages of any conventional conflict in Europe, why is the Air Force supporting closing of the A-10 production line, to buy instead, different aircraft to handle that, using a 30-mm gun pod? It seems they have some very inherent difficulties. ties.

I refer to a particular question. Is it not true that the 30-mm gun pod has half the accuracy, and a 30-percent lower rate of fire, than the GAU-8 gun system of the A-10? If that is the case, where are we going?

General ALLEN. The A-10 is an excellent weapon, and the GAU-8 is a super gun. We have never had a gun that has the effective accuracy that that gun has, nor the antiarmor kill capabilities that those munitions provide.

Further than that, the A-10, armed with a Maverick, represents an addition to those capabilities which makes it one of the finest specialized aircraft for antiarmor kill that has ever been built.

So, we are very pleased with the aircraft and we continue to be impressed with this armor-killing capability.

However, we have met the basic inventory objectives that we felt were proper for the aircraft. It is a specialized aircraft, it is an antiarmor aircraft. It was designed largely for high-armor concentrations of the sort encountered in the central region of Europe, although it has application elsewhere.

We have concluded that we have now met the inventory objectives and finished production with the 1983 request.

Senator D'AMATO. Is the Air Force as well concerned with the loss of one of their industrial bases that is in the position to continue to provide us with the kind of output that is going to be necessary if we are going to better meet our commitments, or are we going to get down on the LTV's, getting out of that area with two suppliers?

General **ALLEN**. Well, as the Senator well knows, that supplier is actively bidding on another program. The results of that have yet to be seen.

A-10 SQUADRONS ASSIGNED TO NATO

Senator **D'AMATO**. Let me ask you a question that will require classified answers for the record. First, in a conventional war with the Warsaw Pact in Europe, how many A-10 squadrons would be assigned to NATO?

Second, what are the Air Force projections for combat losses?

Third, how does the Air Force plan to replace those losses?

Those are matters of critical importance if the number of A-10's is changed down substantially or reduced. There is a question that if indeed there is a confrontation, whether or not we are going to have sufficiency.

I think the committee will be interested to know those answers. As I said, they will be classified.

[The information follows:]

A-10 SQUADRONS ASSIGNED TO NATO

In a conventional war with the Warsaw Pact in Europe, as many as [deleted] could be assigned to NATO. We expect, based on historical experience, A-10 losses to average [deleted]. We would plan to replace these losses with backup aircraft inventory, peacetime attrition aircraft, and if necessary, training aircraft.

INTEGRATION OF HELLFIRE MISSILE WITH A-10

Now, the Army has recently completed development of the Hellfire missile for the new attack helicopter, the AH-64 Apache. That missile has been tested on an A-10. My question is, will the Air Force take a very careful look at the possible integration of that Hellfire missile system with the A-10 inasmuch as certainly we do not want to lose the investment in the development of that missile?

Do you have any plans to explore that? I understand this is a very fine system, and there would be a substantial increase in antiarmor capability through upgrading the A-10.

General **ALLEN**. I agree with everything you said except for the last, sir. We have tested it on the A-10. We believe the Hellfire is compatible with the A-10. We have examined and will continue to examine the desirability of planning to utilize the Hellfire with the A-10.

The advantages that we have seen in it are the ability to have a common logistic base in the war area which could feed both the Hellfires, the helicopters and the A-10. That has been a significant advantage and we have looked at it considerably.

But with regard to the antiarmor capability of the A-10 we continue to feel that the Maverick GAU-8 is the right combination for it. We do need the standoff capability and we believe that the A-10 is best utilized in an environment which does not require laser designation which the Hellfire does.

So, in general, the way we have looked at it in recent years is, we want the A-10 to be compatible with the Hellfire. We want to make a decision under combat conditions if there is a desirability of loading up Hellfires, but we believe the best combination is GAU-8 and Maverick.

CLOSING OF A-10 PRODUCTION LINE

Senator D'Amato. General, one of my concerns obviously is the impact of closing that production line. You know what my position is. I had the Air Force tell me one thing on Wednesday and then move to another posture. As a matter of fact, the reasons for closing the production line still have not been satisfactorily explained to this Senator. As a member of the committee I would like to have much more in the way of an explanation. I want you to know that is my concern and my feeling.

[The information follows:]

Closing of A-10 Production Line

We recognize and are very sensitive to the fact that termination of A-10 procurement will impact Fairchild's future employment levels; however, as aircraft programs near the end of the planned production, we must face the reality that we cannot afford to continue uneconomical production rates in light of other competing critical Defense needs.

The original A-10 program objective was 733 aircraft. During 1978 and 1979, however the A-10 accident rate was much higher than anticipated. Consequently, the overall A-10 program objective was raised in the Carter fiscal year 1981 Five Year Defense Plan to provide an attrition reserve consistent with the observed peacetime accident rate.

Since 1979, improvements in A-10 training and employment procedures have brought attrition rates down. Over the last three years, the attrition rates for the A-10 have dropped by about 50 percent. As a result, a total A-10 buy consistent with the program objective will fulfill Air Force requirements. The final A-10 procurement funded in the fiscal year 1983 program will bring us within six aircraft of that original 733 aircraft objective.

Of the 20 aircraft approved by Congress in fiscal year 1982, only six will be used to complete equipage of the last A-10 unit. The remaining 14 aircraft funded in fiscal year 1982 and all 20 of the fiscal year 1983 aircraft will be used as attrition reserve to maintian a constant number of authorized aircraft in A-10 units. The 14 A-10Bs in the fiscal year 1983 request will replace A-10As assigned to training units. The use of the two seat A-10Bs in this role will free up A-10As at greater than a one-for-one rate, thus yielding additional attrition reserve aircraft.

Finally, budget constraints have forced us to stretch the last 40 aircraft over a two year period. The decision to stretch the program was not an easy decision, but one we deemed preferable to an outright cancellation. Stretching the program allows us to meet our procurement objective and keep the doors open at Fairchild. Nevertheless, it is clearly an inefficient way to procure aircraft.

AIR-TO-GROUND MUNITIONS

Senator D'Amato. I would like to move to a statement in which you said, the Air Force is looking to improve our inventory of air-to-ground munitions, especially anti-armor weapons. You discussed a number of weapons, including the 30-mm gun pod; the imaging infrared Maverick missile; the anti-armor cluster munition; and last, mine clusters, extended range antiarmor mines.

Is it not true that those systems are not in operation? Are any of these weapons systems operational now? Will you give us estimated dates for initial operating capabilities for these systems?

General Allen. I believe all of them, with the exception of the gun pod, are some years away from being operational. Although I cannot recall dates for each of them, dates like 1986 and 1987 are the kinds of dates that we would expect except for the antiarmor cluster munition which could be operational in 1984.

Senator D'AMATO. Then, let me come back. That happens to be this Senator's concern. We are putting tremendous sums into exotics and, I think, abandoning some basics that are absolutely essential, specifically the A-10.

You are totally minimizing the Air Force's responsibility for close ground support. If there is going to be a major Soviet thrust it is going to be behind a wall of tanks, and what do we have to meet that thrust?

The F-16 with a gun pod that we are still working on, which is 30-percent as effective as what we have now? I would suggest to you, this one Senator does not intend to let go of this issue.

General ALLEN. I understand your feelings, sir.

Senator D'AMATO. You said that to me before, General, and then when push comes to shove, something else takes place.

General ALLEN. I should point out that the IIR Maverick which is an improved version of the TV missile which the A-10 now carries, coupled with the LANTIRN pod capability, will change the A-10 from a day-only tank killer to a night and adverse weather tank killer.

We believe that will basically double the effectiveness of the A-10 in that it will permit it to operate during the night when, we believe, Soviet tactics require those tanks to move. So, we are in those programs making major efforts to extend the capability and the effectiveness of the A-10.

Senator D'AMATO. Thank you very much, General.

Senator STEVENS. Senator Andrews?

Senator ANDREWS. Thank you, Mr. Chairman.

ROLE OF AIR NATIONAL GUARD IN TOTAL FORCE CONCEPT

The Air Force is to be commended, Mr. Secretary, General Allen, for their outstanding integration of the Air National Guard into the total Air Force mission. It would appear that the Air National Guard units are performing their assignment very well, as I understand it.

Secretary ORR. Very well, sir.

Senator ANDREWS. I appreciate your understanding that.

To what extent do you consider the Air National Guard when you develop the Air Force long-range force structure?

General ALLEN. The long-range force structure is developed on the concept of total force. That is, we plan for our forces based on the threat. That is, what is required to fight the wars that have to be fought.

After we have determined what the force structure is of the total force, then the decision is made, what is the best allocation of forces between active and reserve forces?

As I am sure you are aware, there are significant differences in the two. That is, for example, the Active Forces have to, in general, bear the burden of forward deployed forces. Where we can, we use Reserve forces for that, such as the deployment to combat which is performed by the Reserve forces and, I think, is a unique characteristic of our application of Reserves to forward deployments.

But in general, the Active has to do that. I mean, the Active has to be based in the continental United States in sufficient numbers to support forward-deployed forces, and also to provide the training.

Senator Andrews. The training of the Guard or the Reserve is treated as an overall program with the exception, obviously of forward deployment.

General Allen. Yes, sir.

Senator Andrews. And exactly the same as any other unit.

General Allen. They meet the same standard, the same ORI are applied to them. In our Guard and Reserve force units they have to meet deployment readiness considerations that are very early in NATO reinforcement.

I should say that they do that very well. In general, the Reserve forces are characterized by more experienced pilots, by combat experience which is lacking in the active forces at the present time, by a somewhat narrower training objective due to less flying time, but by higher skill levels in that narrow training.

The Guard and Reserve forces are most frequently winning bombing competitions and gunnery competitions these days because of the superior levels of training.

Senator Andrews. As the Secretary pointed out, they are very valuable.

General Allen. Yes, sir.

LONG-TERM PLANS FOR MODERNIZING ANG

Senator Andrews. Now, can you detail your long-term plans for modernizing the Air National Guard, with this high opinion you have of it?

General Allen. Yes, sir.

Senator Andrews. Could you provide that for the record?

General Allen. Yes, sir.

[The information follows:]

Long-Term Plans for ANG

The following modernization actions are currently programmed for the Air National Guard between Fiscal Year 1983 and Fiscal Year 1987:

	From	To	Number of units
Fiscal year 1983	0-2A	F-4C	1
	F-105G	F-4D	1
	RF-4C	F-4D	1
	A-7D	F-16	1
	KC-135A	KC-135E	3
Fiscal year 1984	C-130E	C-130H	1
[Deleted]			
[Deleted]			
[Deleted]			

ANG TACTICAL FIGHTER INCREASE

Senator ANDREWS. Do you plan to increase Air National Guard tactical fighter and interceptor unit aircraft authorizations from 18 to 24?

General ALLEN. The number of squadrons are being increased, sir, and we will give you a full list of that.

Senator ANDREWS. Could you provide for the record when you plan to increase these unit authorizations?

General ALLEN. Yes, sir.

[The information follows:]

ANG TACTICAL FIGHTER INCREASE

The planned increases in ANG Primary Aircraft Authorizations in Tactical Fighter, Interceptors and Reconnaissance units are shown below:

	From	To	Remarks
Fiscal year 1983:			
Quarter:			
1	18 F-4C	22 F-4C	Air Defense RTU.
4	18 RF-4C	24RF-4C	Recon Tng Unit.
4	18 A-7D	24 A-7D	
Fiscal year 1984:			
Quarter:			
[Deleted]			
1	22 F-4C	24 F-4C	
1	18 F-16	24 F-16	
4	18 F-4D	24 F-4D	
[Deleted]			

GROWTH OF TACTICAL FIGHTER WINGS

Senator ANDREWS. I have also been informed of the plan to increase the number of tactical fighter units in the total force.

General ALLEN. Not as part of this budget request or indeed as part of the 5-year defense plan does that occur. But as part of the extended plan for which we have indicated to Congress, associated with the procurement of aircraft, it is our expectation that the Air Force will grow from 40 tactical fighter wings to 44.

Senator ANDREWS. Well, would that growth in fighter wings take precedence over satisfying the equipment needs of the Air National Guard?

General ALLEN. No, that is total force. So, that is Guard and Reserve as well as Active.

Senator ANDREWS. Well, when you start adding units my question is, are you going to add the additional units before you upgrade the equivalent of the units you now have? You just established that the Air Guard and Air Reserve units are every bit as effective as the regular units.

The question that I have, then, are you going to add four or six or eight more units before you go back and put more effective, more modern equipment, into the units that are already there?

General **Allen**. I am not quite sure how to answer you except, as I said, for the record we will give you an indication.

Senator **Andrews**. Let me put it more specifically.

General **Allen**. We will be forming some more Guard and Reserve units as we build to 44 TFW's in the latter part of the 1980's.

Senator **Andrews**. Do you intend to increase the number of active tactical fighter units prior to insuring that Air Guard tactical fighter units are equipped with combat-capable aircraft with realistic prospects for survival in a combat environment?

General **Allen**. No, sir. The priorities which the Air Force has assigned to the total force are to insure that the equipment is adequate first, and do that before we do any force expansion. The force expansion really does not occur until even beyond the 5-year plan.

Senator **Stevens**. Would the Senator yield just for a minute?

Senator **Andrews**. Sure.

Senator **Stevens**. Off the record.

[Discussion off the record.]

REPLACEMENT OF F-4C'S

Senator **Andrews**. I take it from your answer that you have some questions, then, about whether or not the F-4C is an effective combat aircraft.

General **Allen**. The F-4C is the oldest model of the F-4s.

Senator **Andrews**. I have been advised it has some serious limitations.

General **Allen**. It has greater limitations than any other aircraft.

Senator **Andrews**. For example, its ability to deliver ordnance on target is poor and so are its prospects for survival. What you indicated before, your plans are to replace these aircraft prior to any increase in the total tactical force structure.

General **Allen**. We have a schedule here, but I am not sure we get the answer from it. But F-4C's begin coming out of the inventory in the next few years. I can construct a schedule if you want, I will do that for the record.

Senator **Andrews**. Will you provide for the record, then, when that will occur, and what assumptions are being made for the air tactical fighter procurement quantities until that time?

General **Allen**. Yes, sir.

[The information follows:]

Replacement of F-4C's

The current Air Force program calls for F-4C aircraft to start coming out of the inventory in fiscal year 1986. This projection is based on procurement of the following number of fighter aircraft through fiscal year 1986.

[Deleted.]

The fiscal year 1986 retirement date may be slipped if there is reduction in planned procurement, new aircraft are diverted to support additional Foreign Military Sales (FMS) or other unprogrammed demands on USAF fighter inventory.

TACTICAL FIGHTER PROCUREMENT RATES

Senator **Andrews**. How do the tactical fighter procurement rates in the fifth year or your current program compare to those same rates next year? I imagine they are up.

General ALLEN. Yes, sir.

Senator ANDREWS. If you can provide that in more detail for the record.

[The information follows:]

COMPARISON OF TACTICAL FIGHTER PROCUREMENT RATES

The F-15 procurement is planned to be 96 aircraft in fiscal year 1987 vice the fiscal year 1983 request for 42 aircraft. The F-16 procurement is planned to be 180 aircraft in fiscal year 1987 compared to the fiscal year 1983 request for 120 aircraft. No procurement of the A-10 is planned for 1987.

FORCE STRUCTURE INCREASE

Senator ANDREWS. Now, you are saying that you have no intention of increasing force structure prior to satisfying these new equipment requirements. What about the new KC-10 unit of the 32nd Air Refueling Wing at Barksdale? As I understand it, that is an addition to the Air Force structure.

General ALLEN. Yes, sir.

Senator ANDREWS. That would indicate that what you said a moment ago is not quite accurate.

General ALLEN. What I said before is a statement of priority, and it is not accurate in detail because what you say is correct, we are adding some capability. We are adding, in particular, airlift forces, and tanker forces for the airlift, recognizing the major shortage in our airlift capability. That is a force increase.

Senator ANDREWS. But could that unit have been established at an existing active unit and released some aircraft to the Air National Guard?

General ALLEN. The KC-10's are being purchased for augmentation of airlifting and not for augmentation of tanker capability in the nuclear strike plan. Therefore, it does not substitute for the KC-135's, it is in addition to the KC-135's.

UPGRADING AIR NATIONAL GUARD UNITS

Senator ANDREWS. But my point is, instead of keeping the KC-135's, they could have been slipped down to an existing Guard unit and kept the same number of overall units, and meanwhile upgraded a Guard unit to a more combat-ready state.

General ALLEN. Are you worried, Senator Andrews, if we do intend to operate the KC-10's under the associate concept under which we have been operating the C-5?

Senator ANDREWS. That is true. I am also aware that the Air Guard has the capability to absorb more aircraft in its existing force structure, and that it could take either C-141's or KC-135's. The fact that you elected to establish a new unit with the KC-10 without taking full advantage of the existing Air Guard Force does not support your previous statement of commitment to fully utilizing the Air National Guard.

General ALLEN. I think we made the right decision there, 50 percent of the personnel assigned to a KC-10 will be Reserve Force personnel, that is, 50 percent is in the Reserve Forces, in the same way as the C-5 or 141. That is a very efficient way to operate those aircraft. We have had great success in airlift forces.

This is an augmentation of airlift, and it seems to us to be a consistent way to operate.

The Guard does very well with the 135's we have, and the dispersal that we get from that is good. But I should point out to you that trying to maintain nuclear alert forces with the Guard Forces is less efficient than with Active. That is, it requires more aircraft to maintain the line of alert.

Senator ANDREWS. In North Dakota, of course, we have the fighter group right next to your SAC bases. I appreciate your commitment that the Air National Guard Force will be fully equipped and utilized prior to adding costly new units to the Active Force. That is what my major thrust is because these shelf units cost us money.

General ALLEN. You are too critical on the F-4C. The F-4C should come out of the inventory as we introduce aircraft into it.

Senator ANDREWS. The impression that I got is that the F-4C's will be upgraded before you add some new overall units.

General ALLEN. My problem is, I am not at all sure how that will work out in detail. Our priorities are to do it that way but in fact when F-4C's come out, new units are going in; A-10's and F-16's are going into the Reserve Forces at the present time, for example, and some F-101 units are converting to F-4C units at the present time. There is a steady process which we work out in detail for modernizing those forces.

The F-4C's do have residual capability, they should be the first one out. But they still have a good deal of residual capability. I think we will have F-4C's in the Reserve Forces for some years to come.

Senator ANDREWS. One last question before my time is up and turn it over to the Senator from Missouri, I still have another half minute.

C-5 PERFORMANCE CAPABILITY

The Air Force, I understand it, decided that the C-5 is the aircraft to handle our airlift. I have heard conflicting reports about the C-5's performance capability. Are you really satisfied that it stacks up compared to the C-17 which you originally said you wanted for cargo and use in the desert?

I understand from the tests that were conducted that sand caused engine failure.

General ALLEN. Well, we separate two things. One is, we have a lot of experience with the C-5 and we are very satisfied. It is a large and effective airplane. We do not have any sand ingestion problems with the C-5.

On the other hand, the reason we have pursued the development of the C-17 is because we do believe that for the future it is a substantially——

Senator ANDREWS. Better?

General ALLEN [continuing]. Better airlifter. That is, it offers a lot of advantage. Being a somewhat smaller aircraft, it will be able to operate at more fields, using some of the more modern technology.

Senator ANDREWS. Has it less tendency to pull sand into the engine? You have the 77 rewinged C-5's now just coming into the force, that is almost like getting 77 new ones, only they are 20 years old.

General **Allen**. Clearly, we agonized over that decision a great deal as we shared with the Congress, at the time we were debating that among ourselves and going carefully through all of the options that were available to us.

But our decision on the C-5 was based on our complete conviction that we needed greater deployment capability quickly. We need it both for Europe and for contingencies like Southwest Asia.

We knew that by reintroducing the C-5 into production that we could attain that capability for the strategic part of it, which was the overwhelming need, quickly with very high confidence and favorable prices that we could control through the ability to enter into fixed price considerations and could get that aircraft on the ramp.

Senator **Andrews**. You have the 77 in operable condition.

General **Allen**. The C-5's before the wing mod were operable and we banked structural hours for the major contingencies such as NATO, and still do that all the way through the change cycles. But those C-5's have always been planned to be fully usable for a NATO contingency. Their lifetime has been at issue and we are correcting that with the wing mod.

Senator **Andrews**. Thank you, Mr. Chairman.

Senator **Rudman**. Senator Eagleton?

Senator **Eagleton**. Thank you, Mr. Chairman.

I am delighted that Senator Andrews introduced this subject matter because that is the one I was interested in.

Senator **Andrews**. I thought I kind of led in to where you were going to go.

Senator **Eagleton**. I am delighted.

Senator **Andrews**. I have a couple more questions you are probably going to like even better, with a great deal more fervor.

C-5/C-17 DECISION

Senator **Eagleton**. General Allen, in response to Senator Andrews' question you said you agonized over this decision. Let me read into the record the recent historical background, and then I will have a question for you, if I may.

In April 1981 the Secretary of the Air Force announced that the Lockheed C-5 proposal did not meet the minimum CX requirements and would not be considered further in any CX competition. That was April 1981.

Then came August 28, 1981, and the Air Force specifically selected the C-17. However, September rolled around. Lockheed made to the Pentagon a fixed-price offer. Then, on December 7, 1981, Secretary Weinberger certified to the Congress that "The national security requirements of the United States for additional military airlift capability merit initiation of the CX program." That was December 7.

Then came January 27, 1982. The Air Force Legislative Liaison Office issued a memorandum stating that the Air Force had reversed its decision on the CX issue, stating that it now preferred

Lockheed's C-5 to the McDonnell Douglas C-17. That memo of January 27 went on to say:

> Until recently, the Air Force had supported the C-X (C-17) as preferable to the C-5N. This was based on the assumption that funding for airlift would be limited to that already in the 1982 budget. With the limited funding, the C-5N could be obtained somewhat sooner than the C-17. However, the Air Force believes that the advantage of somewhat earlier availability of the C-5N was more than offset by the advantages of the C-17, e.g., better military utility and more potential for the ultimate replacement of the C-130 and C-141 force.

Finally, to tidy it up, your statement today on page 22 has some comment on this subject matter:

> While we have had deficiencies in airlift capability for some time, recent developments have increased both airlift requirements and the urgency of expanding our capability. Improved Soviet offensive capabilities have decreased warning and, thus, mobilization time, and place a premium on bringing U.S. power to bear quickly. The altered situation in Southwest Asia following the Soviet invasion of Afghanistan and the continued turbulence in that region has placed added demands on our forces to be able to deploy rapidly. Furthermore, Army equipment modernization has increased airlift movement requirements in terms of the tonnage and the number of outsize items associated with each division. Finally, uncertainty about the availability of en route bases and overflight rights, as well as availability of airfields and facilities in the destination areas, has complicated airlift movement of men and equipment.

Now, my question to you, General, or Mr. Secretary, or both, about this "agonizing" decision—really an on-again, off-again decision because the C-17 decision was on in April, it was on in August, it was on in September, and it was even on in December, but went off in January—is this.

I want to ask the question with respect to the subject matter, as far as the future is concerned. Is it not true that the Air Force has available $31 million which could be so designated and used to continue R. & D. on the new cargo aircraft?

If the answer to that is yes, does the Air Force plan to use that $31 million for that purpose?

Secretary **Orr**. That is a very easy one, fortunately, to answer. The answer in both cases is yes. I thought it was nearer $33 million, but we have in the neighborhood of that amount of money you mentioned, which we hope to use for new programs; and we specifically hope to continue R. & D. on the C-17.

I would like further to add, the Air Force has great hopes in the out-years that we will procure an airlifter like that.

PROCUREMENT DATE OF SIMILAR AIRCRAFT

Senator **Eagleton**. Without trying to pin you down to a precise day, month, or even a precise year when you might contemplate the imminent procurement of a plane similar to the C-17, could you give us a general picture, are we talking midway into the decade of the 1980's? Without tying you down to a precise date, how long do you think you can continue with the C-5, the upgraded version of the C-5? When do you think you will have to go beyond that?

Secretary **Orr**. I will answer, but I will ask the General to correct me. In operational matters he is the expert.

Certainly, we will be looking toward the C-17 as a replacement for some C-130's and the C-141 and it is in the late 1990's that they will start to go out of the fleet. So, it should be in the latter part of this decade that we start to bring in a new airlift aircraft. That is perhaps not entirely accurate.

General **Allen**. That is quite accurate. And it will not be to replace the C-5 at that point. It is because we did not meet a portion of the requirements, and those deal with intra-theater capability, some of the forward deployment base capabilities, the ultimate replacement of some of the 130's and even the aging 141's.

The C-17 is a candidate to do all of that. As Secretary Orr has said, it is the latter part of the decade, the early part of the next, that those requirements begin to surface. So, we would imagine that development toward procurement of that aircraft would be in about the middle of the decade and going into production in the latter part.

URGENT PRIORITY OF AIRLIFT CAPABILITY

Senator **Eagleton**. I have one final question. I realize that any military organization has an abundance of problems, this is a very difficult and complex world. I also realize when you are talking about F-15's and F-16's, and F-18's , and V/STOL's and what have you, the subject is very glamorous. Aircraft of that type get pictures on the front pages of journals. They are indeed very glamorous.

When you talk about cargo aircraft and air-lifting capability, that is not as glamouous, it seems almost ponderous. Nonetheless, on the litany of the problems that the U.S. Air Force possesses in terms of the entire global picture, would you not rate the question of airlift capability to be one of the urgent missions and urgent priorities insofar as Air Force planning is concerned?

Secretary **Orr**. I think we both would fully agree with that, Senator. I think we would say that both of us recognize that substantial amounts of money are being spent for land forces.

They are not going to be wisely spent unless those land forces can be deployed much more quickly than being sealifted. They have to be there, they are urgently needed within hours, and the only thing that can do that is aircraft.

Senator **Eagleton**. Thank you, Mr. Secretary. Thank you, General.

General **Allen**. I would only answer, it is not all that unglamorous. Sometimes that is a pretty glamorous operation.

CBO ANALYSIS OF KC-10

Senator **Rudman**. Mr. Secretary and General Allen, I want to talk a bit about the strategic procurement and tanker procurement. You are now planning to go ahead with the KC-135 reengining program, using the CFM-56.

I am sure you are aware that the Congressional Budget Office has just concluded that the KC-10 procurement would be the most effective tanker alternative. It also notes that if we chose in Congress to limit tanker modernization, to buy an additional 44 KC-10's at a very accelerated pace over the next 4 to 5 years, we could satisfy between 85 and 95 percent of all your requirements through this decade and save about 5½ billion over the next 5 years.

I wonder how you respond to that.

Secretary Orr. I am going to let the Chief respond to it because it gets into the mission of tankers and the fact that the KC-10 is not comparable to the KC-135.

General Allen. Well, sir, the first thing to say is that the CBO analysis has been available to us for a short time and we will make a more detailed analysis of their analysis and respond to you for the record on what that is.

But in general, the way they went about the statement of mission requirements and meeting of them by the various aircraft and mixes, is not correct in our view.

They floated the requirements up and down in a way that makes it hard to get the comparisons that they sought to get. I think we can eliminate that and bring the views somewhat more closely together.

Nevertheless, I do want to say that the KC-10 is a remarkably effective airplane. It is an efficient aircraft in terms of fuel economy, and it is a long-range aircraft, the DC-10-30 mods, and it has a great deal of airlift capability.

So, we have been very enthusiastic about the KC-10. In general, we have not been as enthusiastic about it for adding to the strategic forces because it lacks certain hardening provisions and other things which are expensive to add.

So, the choices that we have made in this 1983 budget are to purchase the 44 KC-10's, but to purchase them to augment our airlift capabilities—both because they can carry cargo, but more significantly because they can refuel C-5's and 141's in midair. That is a very effective addition to airlift capabilities.

The KC-135 will need to remain in the inventory for a very long time in the future. So, the issue remains before us that we need to reengine these aircraft.

CBO ANALYSIS ON KC-105

Senator Rudman. I would like you to respond for the record if in fact the CBO report has some assumptions in it that are incorrect.

General Allen. Yes, sir.

Senator Rudman. I would like to know that and I would like to discuss that with them since we sometimes rely on those reports. If there have been some essential threshold assumptions that are off the mark, I would like to know specifically what they were and where they were wrong, and I would like to have an opportunity to discuss that.

General Allen. Yes sir, we will provide that.

[The information follows:]

CBO ANALYSIS ON KC-10S AS "BEST BUY"

The Air Force has completed its initial assessment of the Congressional Budget Office (CBO) Aerial Tanker Force Modernization Study. The CBO study examined three alternative tanker force options: (Option One) the Administration's program to modernize/reengine approximately 300 KC-135 tankers with CFM 56 engines (KC-135R) and purchase an additional 44 KC-10s; (Option Two) a CBO force that terminates the CFM 56 program, reengines 185 KC-135s with donor JT3D engines (KC-135E), and purchases 44 additional KC-10s; and (Option Three) a CBO force that limits tanker modernization to an additional 44 KC-10 procurement only.

Our analysis does not support many of the CBO conclusions. The CBO projected tanker demand is significantly understated. The impact fails to account for the impact of not modernizing the KC-135A force. Cost-effectiveness conclusions are based primarily on near-term investment costs rather than total force investment and continuing ownership costs. The CBO study also employs the KC-10 in the strategic nuclear mission role without considering the impact on the airlift acquisition strategy. The KC-10 was purchased as a force projection asset, not to support directly the strategic nuclear mission. When acquisition and ownership costs, tanker demand and capability, tanker modernization, and mobility requirements are accounted for, Option One is the most cost-effective option.

Aerial Tanker Demand

Total tanker demand is a function of strategic nuclear and general purpose requirements. The CBO study has the current and projected tanker requirements significantly less than the actual requirements.

Congressional Budget Office estimates for tanker requirements to support strategic nuclear forces do not reflect the complexities of strategic nuclear planning. The CBO study fails to include a large number of important variables and is based on a most optimistic approach. Air Force estimates are based on 30 years of practical experience in determining refueling requirements. Those requirements far exceed the CBO projections.

The CBO general purpose tanker requirements are much lower than Air Force requirements. The study assumes a low demand to support NATO operations. Air Force studies have validated NATO tanker demand well in excess of 200 aircraft over the duration of the conflict. The CBO study also understates tanker demands to support a Rapid Deployment Force deployment because it assumes average demand of F-15 squadrons alone, rather than a mixed force and does not account for attrition fillers. In a Persian Gulf scenario, tanker requirements would be approximately twice the CBO requirements. The CBO study also fails to address the possibility of simultaneous conflict in separate theaters of operation.

Tanker Capability/Modernization

The CBO study states that Options One, Two, and Three provide excess tanker capability beyond 1987, 1989, and 1991, respectively. Based on Air Force projected tanker demand, none of these options provide excess capability and only Option One meets the Air Force moderate risk demand. Neither of the CBO options meets the Air Force moderate risk requirements and neither approaches the low risk requirements. Option One is the only tanker force that gives the Air Force the capability to tailor its tanker capability to support requirements in the 1990s and beyond.

Only Option One provides a comprehensive modernization program for the KC-135 fleet. The KC-10 provides substantial new capability quickly and the KC-135/CFM56 program solves critical engine problems of the present J57 engine, while also modernizing 34 major systems or subsystems.

Option Two with JT3D reengining is not a total KC-135 modernization program and fails to correct all the KC-135 deficiencies. Meeting the Air Force's moderate risk force would exceed the total worldwide inventory of the lower cost JT3D engined 707-100/720s. The Air Force would be forced to procure about 100 of the higher cost 707-200, 300, 400s to meet this option. There are also unanswered questions concerning the maintenance status of those engines.

Option Three only modernizes the force with KC-10s and eliminates any reengining effort. Without CFM56 reengining the Air Force would be forced to seek up to $1.2 billion to insure a completely reliable J57 engine. With that, the J57 would remain 1950 technology, a noisy, dirty and extremely fuel-inefficient engine. The operations and support cost of continuing to operate the KC-135A make Option Three the least cost-effective option, rather than the most cost-effective.

Tanker Force Cost-Effectiveness:

Tanker force cost-effectiveness is a combination of acquisition, operating costs, and tanker improvement factors. The CBO cost-effectiveness conclusions were based primarily on acquisition costs rather than the total costs of acquiring and operating a total force over time. When a comprehensive, life cycle approach is used, Option One is the most cost-effective approach, Option Two is second, and Option Three becomes the least cost-effective approach.

A detailed analysis of life cycle costs for the KC-135 is included for comparison. This further refines Air Force analyses provided to the House and Senate Appropriations and Armed Services Committees in December 1981. The CBO study differs in assuming a 43 percent improvement for the KC-135R versus 50 percent used by the Air Force. It also assumes improved fuel efficiency of 21 percent for the KC-135R versus 25 percent. Life cycle costs are sensitive to these changes. Air Force analysis indicates the KC-135R provides an improvement in capability that ranges from 40 to 200 percent, depending on the length of the refueling mission. The aggregate improvement of 50 percent used by the Air Force is conservative.

In summary, the Administration's program to reengine approximately 300 KC-135s through 1987 with CFM56 engines and purchase an additional 44 KC-10s is the most cost-effective option when total force costs are considered. It is the only program that will meet the moderate risk demand for air refueling in the 1990s. Finally, it is the only option which modernizes the KC-135.

20-YEAR TANKER LIFE CYCLE COSTS PER PAA
(MILLIONS OF FY 81 DOLLARS)
CONSTANT FUEL COSTS

COST CATEGORY	KC-135A	KC-135E	KC-135R
Acquisition	-	4.2-7.3	15.0
Modification	2.9	.8	.8
20-Year Operations & Support (except fuel)	21.0	18.5	18.7
20-Year Fuel	16.7	14.7	12.5
20-Year Life Cycle	40.6	38.2-41.3	47.0
20-Year Life Cycle Factored to KC-135A Equivalent	40.6	32.6-35.3	31.3

10 PERCENT ANNUAL FUEL COST GROWTH

COST CATEGORY	KC-135A	KC-135E	KC-135R
Acquisition	-	4.2-7.3	15.0
Modification	2.9	.8	.8
20-Year Operations & Support (except fuel)	21.0	18.5	18.7
20-Year Fuel	63.7	56.0	47.8
20-Year Life Cycle	87.6	79.5-82.6	82.3
20-Year Life Cycle Factored to KC-135A Equivalent	87.6	69.9-70.6	54.9

Equivalence Ratio

In the aggregate, 1 KC-135R (CFM 56) equals 1.5 KC-135As and 1 KC-135E (JT3D) equals 1.17 KC-135As.

Fuel Efficiency

Compared to the baseline KC-135A, the KC-135R is 25 percent more fuel efficient and the KC-135E is 12 percent more fuel efficient.

ABRV VERSUS MARK-12A

Senator **Rudman**. I want to move on briefly to your strategic procurement in MX program costs.

I believe you have decided to proceed with the development of the ABRV which, I believe, stands for advance ballistic reentry vehicle, for incorporation with the MX. I assume that has a great deal of superior hard target accuracy and so forth.

General **Allen**. It was dominated by a complex set of factors, one of which deals with the method of construction of the weapon that is contained in the advanced ballistic reentry vehicle.

From the view as we prepared the budget, the cost of adding that is substantial. But it was the decision of the Secretary of Defense that that was not a cost to the taxpayer because that cost is offset by reduced costs within the Department of Energy and certain other elements of the Government.

The result was that to the Air Force it looked like an expensive addition for somewhat marginal purposes. To the Secretary of Defense, viewing the requirement for the taxpayer, it looked as though it was basically a no-cost modification which would have long-range benefits. So, the decision was made based on an analysis of that sort.

Senator **Rudman**. I assumed that would be your answer, and it would be a satisfactory answer except for one point.

It is my understanding that the advanced inertial reference sphere system is going to be incorporated into the MX. If in fact that is so and with its supposedly very high accuracy, why retention of the MARK-12/12A in connection with it? They are just as accurate with a much lower cost than the billion dollars for this new ABRV program. Can you answer that for me?

General **Allen**. Well, the improvements in accuracy do not justify the expenditures. The real issue is, are those expenditures, are those costs real. The Secretary of Defense's view is that those costs are not real to the taxpayer. That is, those additional costs do appear in the Air Force budget but they are offset by savings that appear elsewhere in the Federal budget.

Senator **Rudman**. Even assuming that to be true, do we not get the same results for at least a net amount of less money, and get the same results with the ABRVs in conjunction with the present MARK-12A? That is my question.

General **Allen**. Some of the answers we could probably provide for a classified record.

Senator **Rudman**. I wish you would.

General **Allen**. But there are fuzing improvements associated with the ABRV which will aid its effectiveness—what I would say is its effective accuracy. The accuracy, I think, is not the major issue.

In addition, the ABRV has a potential for a higher yield, although one cannot have both the higher yield and the other savings that were postulated. But it does give one a hedge for counteracting certain possible Soviet improvements in the future.

Senator **Rudman**. I do note that in the fiscal year 1982 appropriations bill we put quite a sum of money in for procurement of a

MARK-12A for the 150 Minutemen, to have those modernized. So, you must have some substantial amount of faith in that system.

General **Allen**. Oh, yes, sir. It was the baseline for the MX. This decision has been a change to that baseline prior to production, and one which the Secretary of Defense has made for these reasons.

Senator **Rudman**. Of course, we really do not know what the cost of that will be in a research mode. I can say that sympathetically, and not sarcastically, the great problem with many of these systems is to understand what their costs will be at a point in time when even some of the state of the art is unknown to us.

General **Allen**. Well, the system has been in a fair state of development with tests that have been conducted in the program we call ASMS [Advanced Strategic Missile System], for testing advanced vehicles, and with the warhead having had certain testing. So, it is felt by those people who are responsible for the development to be a low-risk endeavor.

Senator **Rudman**. Let us hope it does not appear in one of the SAR reports in the fourth quarter—I certainly hope not.

NEWSPAPER LEAKAGE OF CLASSIFIED MATERIAL

I just want to conclude by briefly telling you about an article from another publication that I thought, until this morning, was highly classified by the Air Force. That goes to the charge that the chairman made earlier concerning Stealth technology and its use with cruise missiles and so forth, which now appears in bold type in many newspaper stories.

We have another item which I believe overturns the I0C in terms of existence, it was highly classified. I have to tell you that with the care that we take in these hearings, and even in conversations in closed hearings among ourselves to make sure that those Senators that have not received a certain level of briefing on a need-to-know basis, we who have information do not discuss it in front of them.

It is rather disappointing to pick up the morning paper and find those items in a publication of a Defense daily, in this case Army Times. I hope that you will pay a great deal of heed to these leaks because there are obviously some people down there who—not deliberately—do not understand classification, and they are talking to people they should not be talking to. In the long range this can only be harmful.

General **Allen**. Certainly it is harmful.

Senator **Rudman**. Senator D'Amato?

Senator **D'Amato**. Thank you, Mr. Chairman.

COMPETITIVE POSITION OF FAIRCHILD

If the A-10 gets killed, one of the concerns I have is Fairchild's competitive position. They will be forced to lay off personnel. Their bid on the next generation of trainer will be adversely affected by the increased overhead cost factor that will result from A-10 line termination. In fact that it may be in a less than competitive position if the Air Force examined it.

Secretary ORR. The Air Force next generation trainer selection is progressing and there has been no decision made respecting any of the five competitors, nor have I even gotten to the point where prices have been put forward.

I would have to say that I think the prices will be forced to stand alone. I do not believe that, all other things being equal, a higher price would be acceptable simply because it happens to be the only item that a company might be building and their overhead would not be spread over other items.

Senator D'AMATO. That, Mr. Secretary, is exactly my point. As a result of the premature curtailment of the A-10 production—and I say "premature" because I refer to what the Air Force's requirements were—that what could otherwise be a very competitive bid that would save the taxpayers money would be endangered. It would be a superior product, and also would help keep the industrial base of this Nation strong, intact, and in place.

As a result of the premature curtailment of the A-10, we would lose that competitive opportunity to keep these forces in play. A higher cost of operation indeed would be added to their bid price for the next generation trainer, thereby making their bid that much less likely to be successful.

What I am asking is whether you or General Allen, or anyone else, has taken this into consideration?

Do you think that the United States of America's position is enhanced if Fairchild goes belly up? That is the bottom line.

Secretary ORR. No.

Senator D'AMATO. What do you think you can do?

Secretary ORR. Well, I do not think we can continue to buy airplanes that the Air Force feels—and I differ with you when you say it is a premature cancellation. It is the completion of the original buy.

A-10 ORIGINAL BUY

Senator D'AMATO. What was the original buy, Mr. Secretary?

Secretary ORR. Six less than we are ending up buying.

Senator D'AMATO. It was 825.

Secretary ORR. That was altered, the original was six more than we are buying. I think we are buying 727, and the original was 733.

Senator D'AMATO. And when was it altered up to 825, then, General Patton?

General PATTON. I do not know, sir. I am not familiar with it.

Senator D'AMATO. Was it not 825 originally?

Secretary ORR. No, not originally. It is my understanding it was altered just about a year before I became Secretary and then changed.

Senator D'AMATO. Altered up?

Secretary ORR. Yes, it was.

Senator D'AMATO. It seems to me that when something goes the way you do not want it, the Defense Department or anybody else will say, "We have altered it up."

I suggest that it was the other way, it was modified.

Secretary ORR. All right.

Senator D'AMATO. And now it is "altered" down.

Secretary Orr. I will take any word you want. It changed from 733, which is the original buy, upward and back down.

Senator D'Amato. Up to 825?

Secretary Orr. And back downward.

Senator D'Amato. Well, let me ask you this: If the A-10 line is closed, how do you replace combat losses if we have a combat situation?

Secretary Orr. Well, there are substantial numbers of those A-10's which are for attrition.

General Allen. Yes, although those are advanced attrition peacetime losses. The wartime losses are replaced by training units and the like, which are mobilized and sent overseas.

Senator D'Amato. And you are saying, General, we have sufficient?

General Allen. Yes, sir.

PROJECTION OF COMBAT LOSSES OF A-10

Senator D'Amato. Well, I will ask you to answer those questions on a classified basis in terms of what the projections for losses would be. I think that is going to be most interesting to the committee.

I also feel very strongly that when we put our stock in the antitank weapons systems that we have in development which in most cases will not be produced for maybe 4 or 5 years, that you have a gap in planning. And if anything has altered, it has been altered on the "altar of expediency." The F-16, the first kind of plane that comes in, is not going to do the job until costly modifications are made to it and the gun pod is brought up to s[illegible], if that is even possible.

I think we are gambling—we are gambling.

Secretary Orr. We will provide those answers, sir.

Senator D'Amato. Thank you, Mr. Chairman.

[The information follows:]

A-10 Squadrons Assigned to NATO

In a conventional war with the Warsaw Pact in Europe, as many as [deleted] could be assigned to NATO. We expect, based on historical experience, A-10 losses to average [deleted]. We would plan to replace these losses with back up aircraft inventory, peacetime attrition aircraft, and if necessary, training aircraft.

SOLE SOURCE PROCUREMENT OF JET ENGINES

Senator Rudman. Senator Andrews?

Senator Andrews. Thank you, Mr. Chairman.

Mr. Secretary, during inspection earlier on the outyear buys of aircraft, I want to ask a question about that. That is one of the things that bothers me in this whole procurement, is that we seem to be forgetting the lesson we should have learned in World War II when we were able to mobilize because of the industrial capability of this Nation.

I have been told, and looking at your intended buys it seems to me that you are going to more and more sole-source, single-source, procurement for jet aircraft engines.

Do you have off the top of your head, or can you supply for the record, the percentage of engines in these outyears, of all types that you are ordering, or plan to order, that come from one firm or come from another.

Have you make any effort to balance that buy?

Secretary ORR. We have substantial money which we have been expending over a period of time, at least since I have been here, and I think the year before, on an engine from a competitive producer. I think the Air Force is very anxious to have two sources of potential engines for its fighter planes.

Senator ANDREWS. But could you provide for the record how the buys you now have in the pipeline and that you are now asking for on this wish list that you have brought up to us, fall out as far as the two?

Secretary ORR. I do not believe I could. I am going to ask the General, but I do not know that we are far enough along to tell you where an engine might go in 1985 or 1986, or 1987.

Senator ANDREWS. Well, I would think from the procurement numbers that you come up with you certainly know what types of engines go on those aircraft.

General ALLEN. The fighter production is of course F-15's and F-16's. Those aircraft both use the F100 engine. We are bringing the F101 engine made by GE into a competitive status with the 100 engine in order that we can compete that—if that is what we decide to do—in the next few years.

That engine has already flown in the F-16 and F-14. It is an engine that is not as high performance as the F100, it has higher thrust but not as low weight. But its characteristic that is important to us, it is a more durable engine. We will have less in-service operating and maintenance costs associated with the engine.

Senator ANDREWS. What kinds of engines go into your tankers and your bombers, as well as the fighters?

General ALLEN. Jet engines.

Senator ANDREWS. It is a jet engine that keeps a plant going.

General ALLEN. The B-1, of course, does have the well developed F101 engine, which is a GE engine, and one could not reasonably introduce competition into that run because we have the $4.5 billion of development of that air frame-engine combination.

DUAL SOURCE PROCUREMENT

Senator ANDREWS. The thing I hope you will supply for the record, in total anticipated numbers of engines for those very buys in the next 5 or 6 years, as far as the planning goes. How many are coming in each year from which plant. Then we can kind of balance and see whether you are balancing up the engine procurement.

Secretary ORR. That causes me a problem, Senator. That is why we are competing for every engine, so that if indeed it proves not to be satisfactory it would be changed. Therefore I do not want to make a guarantee that the same engine that is in the F-15 today will be in there in 5 years.

Senator ANDREWS. Well, I do not want any guarantee other than the fact that you are paying particular attention to maintaining dual source procurement for something like jet aircraft engines. Your figures, I hope, will show that.

[The information follows:]

Dual Source Future Planning for Engines

In order to address the concept of dual source procurement for jet aircraft engines, it is best to review the distribution of the Air Force's engine business. Through comparison of past and present market shares with projections of the future market shares, a good overall perspective of the military jet engine picture will emerge.

Air Force best estimates for the known and projected market shares are:

[Percent of market] *

	Fiscal year—				
	1980	1981	1982	1985	1990
Pratt & Whitney Aircraft (PWA)	65	73	60	41	47
General Electric Company (GE)	26	23	33	53	47
Other Contractors	9	4	7	6	6

*Includes research and development, production, and initial spares.

Our fiscal year 1985 projections show GE taking a temporary lead due primarily to B-1B engine acquisition. Even assuming a competition and a 50/50 split of potential fighter engine procurements, the fiscal year 1985 estimate does not particularly favor either contractor. The fiscal year 1980 market sharing assumes completion of B-1B acquisition and that the fighter engine acquisition remains an even split.

The business shares of the two major jet engine manufacturers are relatively even in future years. The actual share each will obtain rests heavily on the outcome of the planned fighter engine competition directed by the Air Force. This situation will force the two companies to keep prices down, offer viable warranties, and strive for the best possible engines in order to remain competitive.

Our anticipated fighter engine competition is specifically intended to establish two primary contractors for future large fighter engine procurements. We expect the competition to result in a relatively balanced market. We want to insure that there are two fully acceptable engines available for our derivative fighter force. The strategy, in effect, guarantees a dual source for future procurements. This not only makes good business sense, but having two sources will provide an overall life cycle cost advantage and more durable/supportable engines. Such a posture will yield maximum benefits to the Government and maintain a healthy jet engine business base in the United States.

MX BASING SYSTEM

Senator **Andrews**. The other question I have is on the MX. I asked Secretary Weinberger this question. The basic request for MX continues to be a problem. During the Carter administration we proposed to go with the MX scheme, and now we have a missile and you say that the deep basing is not satisfactory. You say basing the missile is not satisfactory.

You are going to put them in the Minuteman silos, as I understand it now. I have had drilled into me for the 18 years that I have been on the Appropriations Committee the fact that we have to be cost-effective.

It totally escapes me how we are being cost effective by putting a 10-warhead missile down in a hole that now holds a three-warhead missile that is already targeted by the Soviet Union.

What advantage do we get out of giving them 3⅓ times more target than they have at the present?

General **Allen**. Senator Andrews, let me go over this rather quickly. First of all, it is very clear that the objective of the MX program must remain a survivable, survivably-based missile system. So, clearly, the cost effectiveness of the MX system is contingent upon it being based survivably, and we are proceeding toward that goal.

Senator **Andrews**. You have not told the committee of any combination or consideration for deploying the MX in combination with the ABM, or BMD, or whatever we are talking about now.

General **Allen**. No, sir. There are some who have high expectations for the continuous patrol aircraft. There are a number of reasons why the deep underground basing can be effective. It has operational limitations which make us regard it as not a total answer, but is it is very likely going to prove to be—when we come back to Congress next summer, in 1983—I am very certain we will be able to show there is an effective basing system with technology that can allow us to do that.

But with limitations as to how many, or how the cost of that will work out. And then the association of MX with a defended basing system is a very hopeful endeavor in which a great deal of progress is being made, and that is, again, to be brought to a focus in the summer of 1983.

Senator **Andrews**. You do not know where you are going to put them. But how much would we save by eliminating the MX missile from the fiscal 1983 budget, $2 billion?

General **Allen**. I am sorry?

Senator **Andrews**. Or $1.8 billion?

General **Allen**. I am not really sure I quite understand your question. Let me return to your earlier question.

SAVINGS IN SLIPPING MX PROCUREMENT

Senator **Andrews**. It is very simple, how much would we save in the fiscal 1983 budget by eliminating the MX missile procurement, since we do not have a place to put it and we are looking for dollars to cut.

General **Allen**. If the MX program is terminated, the total amount that is requested in the budget is about $4.5 billion. I do not have available to me the termination costs in fiscal year 1983.

Senator **Andrews**. I understand. I have a couple of figures and that is why I asked you. I have the figure of $1.446 billion, and I have another figure of $1.829 billion. That is if we slip a year because we do not know where it should go.

General **Allen**. Oh, to slip a year, to not have production.

Senator **Andrews**. Just not to get any production.

Secretary **Orr**. I am sorry, I think we both misunderstood, we thought you meant just to cancel permanently.

Senator **Andrews**. Well, if we cancelled permanently, that means you are satisfied that at no time in the future you are going to be able to make mobile missiles. I sort of like the idea to have something the Russians cannot target. But I am totally unsatisfied with the fact that you are buying a missile—you know, it is like buying a Rolls Royce and you do not own a garage to put it in.

We are looking for ways to save money, and if we can come up with a billion and-a-half or two billion, you know, a few billions add up to a real savings.

Secretary ORR. Is your question if we defer for a year?

Senator ANDREWS. Defer any procurement of the MX for a year, what the figure would be.

Secretary ORR. Are you talking about both the missile and the basing?

Senator ANDREWS. Well, obviously since you do not know where you are going to base it.

[The information follows:]

SAVINGS IN SLIPPING MX PROCUREMENT

If we delay missile procurement one year, the total fiscal year 1983 procurement request of $1.49 billion could be moved into fiscal year 1984. However, this would cause a $250-300 million cost increase due to inflation.

Secretary ORR. There is an IOC on the missile for 1986, and it is conceivable that in July of 1983 the Secretary of Defense will have a basing system.

COST OF NEAR-TERM SILO BASING

Senator ANDREWS. I understand your near-term silo basing will cost $715 million, that is in the budget.

Secretary ORR. Yes, sir.

Senator ANDREWS. And yet, when you are presenting this budget you are telling us you do not know where you want to put them.

Secretary ORR. No, our budget puts them in the Minuteman silos.

Senator ANDREWS. Yes, temporarily.

Secretary ORR. Yes.

Senator ANDREWS. So, we are spending $715 million to put them in those silos, unhardened and temporarily.

Secretary ORR. That is correct.

Senator ANDREWS. And the Soviets would be getting ten for the price of three while they are sitting in the hole. It is going to cost us close to a billion dollars to get that temporary home while we decide where we are really going to put them.

General ALLEN. There are a number of advantages to putting them there temporarily. Obviously, survivability.

Senator ANDREWS. That is to park them in a warehouse.

General ALLEN. I think it is important to put at risk the Soviet latest ICBM's, that is the 308 SS-18's, which are unmatched in the U.S. inventory at all. Those missiles will do that.

That will provide leverage for any future discussions which we are going to have. It provides an incentive for the Soviets to look to improving the instability of the present situation which was caused by them having so many highly fractionated and vulnerable ICBM's.

Senator ANDREWS. When you are talking about the instability of the present situation, that is one of the things I think is going to be exacerbated if you stick the 10-warhead missile down in a nonprotected hole. You are almost advertising to the world at large it can launch an attack.

General **Allen**. The instability is brought about by the very competent, large Soviet ICBM's. Clearly, to offset that we need to go to survivable systems and we need to get them to go to survivable systems.

Senator **Andrews**. But when you do not go to a survivable system and you do put this down in an unprotected hole, or a not satisfactorily protected hole, you will admit—it appears to me that you are taking that step in the direction that I do not think you want to go. We are moving into a hair-trigger type of status.

General **Allen**. It is not a step in the direction that we ultimately want to go. But it is a step which provides security advantages to the United States over the years.

Senator **Andrews**. It might send a strange signal.

I have exceeded my time, Mr. Chairman; I appreciate the opportunity. Thank you.

Senator **Stevens**. Senator Johnston?

Senator **Johnston**. Thank you, Mr. Chairman.

OUTLAY SAVINGS IN CANCELING B-1B PROGRAM

Mr. Secretary, General Allen, or General Patton—whoever wants to answer this—as you know, there is discussion about the size of the tested various plans, so-called knowledge plans, dimension plans and others, which would take a great deal of money from defense—as well as other areas—in order to get the size of the debt down.

Most of those plans are not terribly precise as to what they would cut, but I would sort of assume that most of them would cut the B-1B program.

Now, my first question is, with respect to the B-1B program outlays, can you give me the outlay savings if the B-1B were canceled for 1983, 1984, and 1985?

I take it the 1983 savings would be $4.8 billion. At least on page 9 you requested $4.8 billion for fiscal year 1983. I do not know whether that is outlays or obligations.

Secretary **Orr**. That is obligation authority.

General **Allen**. That is obligation authority.

Senator **Johnston**. How much of that would outlays be?

Secretary **Orr**. In aircraft procurement, basically 9 percent outlays the first year.

Senator **Johnston**. That is research, development test and evaluation, initial spares, purchase of the initial aircraft. But can you tell me the outlay savings for the B-1B cancellation for 1983, 1984, and 1985?

Secretary **Orr**. We can provide those figures for the record, sir.

Senator **Johnston**. All right, I would appreciate that.

And then, what would be for those who say that we can wait for the Stealth, that the bomber, the B-1 bomber—and I am not going to get into the size of the radar cross section now between the Stealth and the B-1—but I would like to get into the total question of whether we really need a bomber.

I am not arguing, I am asking because that question will come up.

Secretary **Orr**. Yes.

[The information follows:]

OUTLAY SAVINGS IN CANCELLING B-1B PROGRAM

If the B-1B program were cancelled, the potential outlay savings in FY 1983 would be $1.6 billion. If the program were cancelled in FY 1984, the potential outlay savings in FY 1984 would be $3.2 billion. Cancellation in FY 1985 would result in a potential outlay savings of $4.7 billion in FY 1985.

These potential savings would be substantially reduced by contract termination liability and investment incentive costs — these costs total approximately $455 million if the program were cancelled in FY 1983.

Regarding the need for a manned bomber, it is necessary to first address our basic philosophy on strategic forces and their role in deterrence.

The primary role of our strategic offensive forces is to provide a high confidence deterrent against nuclear attack or coercion. To be credible, U.S. strategic forces must pose unacceptable risks to the Soviets under conditions of general nuclear war, while providing the flexibility to respond appropriately to lower levels of provocation.

To create this unacceptable risk for the Soviets, the U.S. maintains a diversified force of land and sea launched ballistic missiles (ICBMs and SLBMs) and strategic bombers, known as the strategic Triad. No single element of this deterrent force can satisfy all of the required strategic offensive tasks; rather, each provides unique capabilities which, in combination, ensure our ability to respond effectively under all circumstances, including that of a surprise enemy attack.

Historically, the unique military characteristics of the manned bomber have provided a vital dimension of flexibility to our strategic and tactical forces. Bombers are the only element of the Triad of strategic forces that can be launched prior to the decision to employ nuclear weapons, and take actions that cannot be anticipated or preprogrammed in missile systems.

Bombers can be launched to ensure their survivability, or to signal national resolve during times of crisis, with confidence that the crew can be redirected or recalled as the situation develops. Bombers can be put on increased ground alert, dispersed to remote airfields, flown on airborne alert, or dispatched to trouble spots throughout the world without a final commitment to use their weapons.

As reusable strategic weapons systems, bombers can deliver large nuclear or conventional payloads accurately throughout the entire spectrum of conflict. The flexibility inherent in the multi-mission/multi-weapons capability of the manned bomber, in conjunction with land and sea launched ballistic missiles, poses a formidable defensive problem for the Soviets.

The manned bomber is the only element of our strategic Triad that is also able to complement our tactical forces by providing the flexibility for non-nuclear force projection in response to unforeseen contingencies worldwide. In collateral maritime roles, bombers are able to supplement U.S. naval forces by providing long-range sea surveillance, ship attack and mine-laying capabilities.

In light of the rapid advances in the Soviet military arsenal and Soviet-backed adventurism around the world, the need to modernize our strategic bomber force is clear and compelling. The B-52 has been the mainstay of our manned bomber forces for the past 25 years; but, their ability to continue to support their demanding tasks is diminishing. They are becoming more difficult and expensive to maintain and, more importantly, will become increasingly vulnerable to a Soviet first strike and to Soviet air defenses over the next several years.

Because B-52s are not hardened against the effects of nuclear blasts and are relatively slow in flying out from their bases, they are becoming more vulnerable than desired to attacks from Soviet submarines patrolling off our coasts. Moreover, because of their large radar reflectivity and relatively slow speed at low altitude, the B-52 will become far less able to penetrate increasingly capable Soviet air defenses during the latter part of this decade.

The limitations inherent in the B-52s make it imperative that we produce a replacement aircraft now. Accordingly, we have begun a time-phased bomber modernization program designed to utilize the remaining capabilities of the B-52 while laying the groundwork for our future bomber force.

The first phase of our plan calls for the major portion of the B-52G and H force to be equipped for cruise missile carriage. This will be closely followed by the production of some 100 B-1Bs, which will have an initial operational capability (IOC) in 1986 and will be fully deployed by 1988.

Production of the B-1B addresses U.S. requirements to increase targeting flexibility, to redress the relative decline of our strategic capabilities and to revitalize our strategic deterrent. The B-1B program will significantly enhance the manned bomber portion of our strategic Triad through its inherent versatility and responsiveness across the spectrum of conflict, preserving the vitally needed capabilities for nuclear and non-nuclear force projection (including augmentation for maritime missions) in response to unforeseen contingencies worldwide. The final segment of the bomber modernization plan is to proceed with the development and production of an Advanced Technology Bomber (ATB) with an IOC in the 1990s.

In sum, to provide a credible deterrent, the U.S. must maintain a modern strategic bomber force -- a flexible, long-range striking force that can fulfill a wide range of nuclear and conventional missions. Acquiring the B-1B while continuing to pursue the ATB is the most prudent approach for revitalizing our bomber force. This approach enables us to field a flexible and extremely capable bomber in the middle of this decade while providing the breathing room necessary to develop the ATB at the most reasonable pace.

MOBILE TARGETS

Senator **Johnston**. I have never been quite satisfied with what you mean about engaging unanticipated or mobile targets. Would you explain why that is important?

General **Allen**. There are two aspects. Of course, one of them deals with the single integrated operational plan, the nuclear strike plan, against the Soviet Union.

The other deals with the application of the B-1B in conventional force projection kinds of missions.

Talking about the Soviet Union, there are classes of targets which we have found difficult to hit over the years, that are nevertheless extremely important in operational planning. They are the kinds of targets that are typified by Soviet armies which are out of the garrison but not very far out of the garrison under conditions under which we might be obliged to retaliate.

Those kinds of targets are identifiable by a manned bomber with proper radar and can be attacked by them. There are a significant number of those kinds of targets.

Senator **Johnston**. Those are armies in the field you are talking about?

General **Allen**. Well, they are not really in the field; they are the armies that have been in garrison but in association with a Soviet mobilization and alert which has gone forward prior to their strike, which we are now presumably retaliating against.

They have moved out of their garrison. So, the traditional way to target those kinds of forces with missiles such as ICBM's is of course against the garrisons, not against the troops themselves, the armies themselves. But with a bomber one can target those where they actually are.

Now, those are mobile in the sense that they move. They are not mobile in the sense that you are certainly not trying to chase the tanks down the road with B-1's, but you are attempting to hit the major forces that have moved from their pre-war identified location.

Now, in the conventional war kind of application, of course, it is even more a dynamic situation where one anticipates, for example, in a Southwest Asia kind of combat situation where one would use the bomber to go forward to interdict lines of communication to Iran the Soviets might be following. The bomber has the capability of striking those areas where there are bridges or other constructions that have the advancing columns on them. They can identify them, which is important.

Senator **Johnston**. Well, I am not talking about conventional war because I think that is rather obvious. What I am getting at is, I just want you to explain what kinds of targets. This division has moved out of the garrison, is in the field; or is it a column of tanks, or just what is it that we are chasing now with the bomber?

General **Allen**. Well, it is, under that kind of scenario, a very large force. We are not talking about a single column, but we are talking about large forces which would move from their prewar location to another location which the Soviets would have practiced. That location, typically, is not very far away, but it is far away compared to the effective radius of the nuclear weapons that would be applied against those armies.

Senator JOHNSTON. You can discern that with radar?

General ALLEN. Yes, sir.

Senator JOHNSTON. How long would it take to recalibrate—I do not know whether this is classified or not—your cruise missile or your ICBM warhead to put some new coordinates on that? In other words, let us say you have the high-flying plane up there, reconnaissance plane, which gives you the coordinates, and it says the division has moved from point A to point B; they give those coordinates back.

How long does it take you to recalibrate those coordinates in on your cruise missile or your ICBM?

General ALLEN. There are two kinds of answers to the question, sir. I think theoretically one can imagine doing those kinds of things. That is, one can have tapes that contain lots of targets in them and an automatic kind of reloading capability for missiles of various kinds.

As a practical situation-if one regards any of these discussions as practical—the situation is certainly very much complicated because you are talking about a circumstance after there has been a major Soviet raid.

The ability of the United States to respond to possible sources and intelligence as to activities within the Soviet Union and then retarget its strategic forces is not provided very high confidence by me.

USE OF RADAR

Senator JOHNSTON. By the same token I would think a plane just cruising around the Soviet Union, looking with its radar for moving targets down there, would not be a very good risk.

General ALLEN. No, and it would not be cruising around the Soviet Union very long because their defenses are too good for that. It is instead going in very low and working against Soviet defenses as effectively as it possibly can. It is doing that to survive.

But as it goes down a path which needs to be preselected, it can in fact tell whether major Soviet formations are here or there. That it can distinguished and shift its attack in that attack plan. Our analyses of these have indicated there is significant value associated with that.

Senator JOHNSTON. All right. So, we have those moving targets that we would pick up by radar. Would we pick those up flying high or flying low?

General ALLEN. Low.

Senator JOHNSTON. You would have to be very close to them if you are flying right on the deck. You would almost have to know where they are supposed to be in order to pick them up.

General ALLEN. You need to know, if you will, where they were and when they started to move. Then you will need to find the major axis along which they move.

Senator JOHNSTON. And if you miss them by very many miles, a couple of miles—if there is a hill or a depression, or something in between—you miss them, will you not, unless you come back and circle around?

General **Allen**. You do not do very much of that, that is for sure.

USES FOR STRATEGIC BOMBERS

Senator **Johnston**. So, we have the moving targets, I understand what you are saying.

Now, what other use would there be for the strategic bombers?

Secretary **Orr**. I wonder if I could interject just one thought which I have always thought was one of the greatest values. We thought recently about launch under warning, launch under attack and the hazards connected with that as far as missiles.

The hazards connected to that, as far as the bomber, are infinitely less. We can easily put them on the runway, no one is hurt. We can take them off. We will probably have hours in which they are now carrying missiles toward the enemy. There is a long lag to determine whether or not this was a false alarm. It does away with the hazards associated almost universally with the worrisome launch under attack.

Senator **Johnston**. I find that argument convincing. The difficulty is, it does not jive well with the window of vulnerability. We have the B-52's now and sooner or later we will have the Stealth. We have launched the B-52's under alert and had them flying, have had them penetrate as well.

It just seems to me in terms of construction—I say it seems to me, I am groping in my mind to answer the argument that others put out—whether or not there is really that much we can do with that bomber other than in a symbolic sort of a way show the flag. Have them launched, show our determination and that sort of thing.

But in terms of destruction, whether we can reap a different kind, a greater amount of destruction with a manned bomber than we can with a cruise missile, ICBM, or intermediate range missile.

Secretary **Orr**. It is our view that we can. I have been personally a very strong supporter of that. One thing that I believe needs to be said, and that is that we do not look at the B-1B as an interim bomber. Some people talk about it as though it were useful only until this advanced technology bomber comes in. That is not our view, it goes beyond that. It will be a useful part of our forces for hopefully as long as the B-52's have been.

ALL-VOLUNTEER FORCE

Senator **Johnston**. General Allen—and this is my final question—you speak about the All-Volunteer Force, it seems to me, in less than absolutely enthusiastic terms. I happen to think that all volunteer forces are a failure, I always thought it would be and I think it has been proven to me.

If you had your way, General Allen, would you „have some form of conscription?

General **Allen**. Sir, I find that a very complex question, I will have to answer in a couple of ways, if I may.

First of all, the All-Volunteer Force has been a great success for the Air Force. We have always been a volunteer force, even when there was a draft. And during the period of time when recruiting and retention was most difficult, we still were quite successful in recruiting—although we did have some serious problems in retention.

Because of that, and because that situation is very bad, as far as the Air Force is concerned the issues of the All-Volunteer Force really do not affect us very much. That is, our problem is retaining skilled and trained people to serve a full career of 12, 16, or 20 years in the service. We need them to do that.

So, in our personnel programs our attention is focused on retention. Whether it is volunteers coming in, which we get good people to come in, or whether they were drafted, really is a secondary issue to being assured that we train them, build them, and keep them to be effective in the Air Force.

But I now have to add two comments, separate points of view. One of those is, the Joint Chiefs of Staff in viewing this problem—of course we view it as well as we can with respect to all of the services—and the Army, looking out into the future and viewing the decrease in the population of 18-year-olds and some of the difficulties they had in other years, would tend to anticipate that they will need to return to some form of draft at an unidentified point in the future.

Therefore, the Joint Chiefs of Staff have that as a collective view.

Now, another issue which unfortunately complicates the matter and about which I present no expertise, is really dealing with the equity of this whole matter. That is, is it better for the Nation to have a force which draws equally across the whole spectrum of the population to fulfill the obligation of national service, and everyone to appreciate that he has that obligation and for it to be applied to everyone without prejudice as to their circumstances.

Clearly, that has a rationale to it that goes quite beyond our responsibilities in the Air Force. I recognize that. There are many people in the Air Force who feel strongly about that, that the Air Force can operate and continue to operate an All-Volunteer Force.

Senator JOHNSTON. Your main problem, then, is not initial acquisition of the proper people with proper skills, but the retaining of those.

General ALLEN. Yes, sir.

Senator JOHNSTON. But you do think that as the recession gets over with—which we hope it will, hopefully by the second quarter—as that begins to take place, you think that initial recruiting may then become some problem, certainly with other forces.

General ALLEN. With other forces. I think the Air Force will still remain a very attractive place for young people to seek opportunity and challenge.

Senator JOHNSTON. Thank you, General.

Secretary ORR. Senator, with your permission, could I add just a word to that?

Senator JOHNSTON. Certainly.

Secretary ORR. I have seen the draft in World War II, Korea, Vietnam; and it is my opinion that progressively the draft became increasingly skewed toward minorities and the poor. I would hope that if we ever do go back to the draft we could equate it more fairly.

In World War II we had an educational deferment that did not apply to many of the poor, many of the minorities; defense jobs were deferments. If you had no skills, or you were poor or a minority, not in school—you did not qualify for a deferment so that the people who went were at a different end of our social spectrum. I think that is grossly unfair and I would only hope if the time comes that we have a draft, that we can apply it across the board equitably for everyone.

Senator JOHNSTON. I think we can. Thank you.

INFLATION IN BUDGET

Senator STEVENS. Mr. Secretary, we have strong pressures on us to reduce expenditures now, and we have been wrestling over statements to the Budget Committee on what we are going to do with the budget process.

If we look at the Air Force budget, we have a 21 percent increase in outlays in 1 year. I need to ask you a series of questions concerning that.

The first is, what is the inflation factor in the Air Force's portion of this budget?

Secretary ORR. We are providing a series of inflation factors which come down in total to 6.9 percent, but which run as high as 8.5 percent for aircraft procurement and missiles.

Senator STEVENS. How does that compare with the actual experience in 1981?

Secretary ORR. It would be well below our experience in 1981.

Senator STEVENS. I thought the Government was trying to increase that for the period where the inflationary spiral was above 5, in budget projections. Now it appears the inflationary spiral is down. It was reported to us in the last 3 months in the general economy it is 4.8 percent and in your area it is 6 percent.

Secretary ORR. Yes, sir.

Senator STEVENS. Have you considered that the new projection is based upon the actual experience within the last 6 months with regard to inflation, that is a realistic figure?

Secretary ORR. No; the figure that was given us was probably prepared by the OMB in late December or January, between the time frame these figures occurred. But if we are successful in holding at 6 percent, which is yet to be proven because you and I both know that one quarter does not make a full year, we are still not very far off from an overall percentage of 6.9 percent.

REAL GROWTH PERCENTAGE

Senator STEVENS. What is the real growth in your estimate, what percentage of real growth does the Air Force use overall? Overall it is about 12 percent. What is your real growth?

Secretary ORR. It is 12.2 percent.

Senator STEVENS. How much of that real growth is tied to these strategic items in the President's program?

General ALLEN. I do not have that, Mr. Chairman.

Senator STEVENS. Can you supply it for the record?

General **Allen**. Yes.

[The information follows:]

PERCENT OF REAL GROWTH USED BY AIR FORCE

About 4 percent, or one-third of the overall Air Force real growth of 12.2 percent, is represented by Strategic items.

AREAS REQUIRING PROTECTION DURING CUTBACKS

Senator **Stevens**. We have been bandying around figures. As a matter of fact, the highest one I have seen outside of the chairman's figure was 7 percent. We have submitted the President's figures to the committee.

If we had to reduce this to 7 percent, that means we would have to take 5 percent of the real growth off this budget. What areas do you think would require protection first on any reduction?

Secretary **Orr**. First let me ask, Mr. Chairman, are you referring to a reduction in obligation authority or outlays?

Senator **Stevens**. Outlays.

Secretary **Orr**. Outlays. That would cause us to undertake a very substantial rethinking of our budget. I am not trying to tell you that it cannot be done—it would be silly of me telling a committee of the Congress what can and cannot be done—but the problem is this, the 1982 budget that we are working under, for example, in aircraft procurement we will spend 9 percent this year and 52 percent of that money next year.

Now, if next year, which is the 1983 budget we are talking about, is restricted, we have two choices in order to cut back. We can either go back and renegotiate contracts which are being made at this time—with considerable chaos—or we can acknowledge that those contracts will then distort our 1983 picture by going forward with a substantially higher fiscal portion of rates, and we would have to make very substantial cuts in O. & M., possibly in civilian and military personnel.

Senator **Stevens**. We are talking about growth now, not the outlays that are reflected in the current base. What is your current year's—1982's—real growth?

Secretary **Orr**. Real growth in 1981?

Senator **Stevens**. Yes.

General **Patton**. That is 14.6. If I could go back to answer your question about the real growth. The real growth in 1982 and 1983 is 35 percent.

Senator **Stevens**. One of the suggestions was to continue into 1983 the levels for 1982, which would reflect a 2-year growth over 1980 of 15-plus percent.

General **Patton**. 14.6 percent real growth 1980 to 1982.

REAL GROWTH FIGURES

Senator **Stevens**. How much would you have to cut in outlays for 1982 to come down to a real growth figure and in fact maintain the same level as 1982? Come down in 1983 to the same real growth level of 1982. You have an inflation factor of 6 percent. How much money would you have, what would be the amount you would have to cut to get that growth?

General **Patton**. Sir, the real growth in 1981 and 1982 is higher than in 1983.

Senator **Stevens**. I understand that, but it is compounded and added on top. So, what we are saying is, we maintain the same level for 1983, that is the proposal. It is a serious proposal before this committee, no growth in the budget. Maintain the growth from last year but no growth in terms of next year. What would be the level of expenditures if you were held to the same factors plus inflation?

General **Patton**. We would have to cut about $8 billion out.

Senator **Stevens**. About $8 billion?

General **Patton**. Yes, sir, the Air Force budget.

Senator **Stevens**. That is outlays we are talking about?

General **Patton**. No, sir, that is still obligation, you do not have outlays. When you work it out you get into the problem of counting the prior year money.

Senator **Stevens**. Will you give us that for the record?

General **Patton**. Yes, sir.

Senator **Stevens**. That is, What would be the cut if we maintained the same level as far as the Air Force procurement is concerned?

[The information follows:]

REAL GROWTH FIGURE

The required cut in Air Force fiscal year 1983 procurement outlays to maintain the fiscal year 1982 level of real growth is $3,182 million.

[Fiscal year 1983 base year; in millions of dollars]

Aircraft procurement:	
Fiscal year 1983 outlays	12,458
Fiscal year 1982 outlays	−10,471
Required cut	1,987
Missile procurement:	
Fiscal year 1983 outlays	4,178
Fiscal year 1982 outlays	−3,603
Required cut	575
Other procurement:	
Fiscal year 1983 outlays	4,806
Fiscal year 1982 outlays	−4,186
Required cut	620

However, 73.2 percent of all fiscal year 1983 procurement outlays are the result of prior year Congressional appropriations and subsequent contractual obligations. To use outlays as a measurement of real growth is to ignore the asymmetrical outlay pattern of the procurement approriations which is heavily skewed to the second and third years for a single program year. To reduce fiscal year 1983 procurement outlays to the extent proposed in this example would require extensive prior year contract terminations and rescission of prior year appropriations.

SUPPLEMENTAL INCREASE

Senator **Stevens**. You had a supplemental of more than a $½ billion, and $219 million is for new aircraft, for spares; and another $75 million for real property maintenance.

We added on to the budget in those two areas beyond the request of the administration in the bill that passed last year, is that right?

In some of the areas we were criticized by the authorization committee because we went beyond the authorization.

Why is it that we now have an increase in the supplemental that goes beyond in those two areas?

Secretary ORR. Those were the areas where in conversations with the Secretary of Defense is was felt there was sufficient urgency, and they would be brought to the attention of the committee this time.

Senator STEVENS. Why can they not wait until the regular bill for 1983?

Secretary ORR. Only because, as we were talking earlier, the necessity to airlift our troops abroad and the buildup that we are making in the Army without the ability to get where it might need to fight. The Secretary of Defense felt it was of sufficient urgency to put it in this form.

Senator STEVENS. Well, we gave you $50 million for the wide-bodied airlift in last year's bill, the 1982 bill. What have you done with that with regard to aircraft procurement?

General PATTON. Sir, that is part of the C-5 decision. We are asking the Congress to take the 1980 and 1981 CRAF money and reappropriate that into 1982. Take the 1982 CRAF money and reprogram that to the C-5, and add the money that is in the supplemental for the C-5 to get the C-5 started.

Senator STEVENS. We are going to have a hearing on the C-5 concept. I understood that was for a C-5B as opposed to A, and for two KC-10A tankers. Am I incorrect?

General PATTON. No, that is true. The $219 million in the supplemental in 1982, part of that money, about $99 million, needs to get into the C-5 program so that the rolled up money for the CRAF, for wide-bodied, $50 million, and $99 million for supplemental, would give us $270 million to get the C-5 started. The rest of that $219 million is for the KC-10.

C-5 CONTRACT

Senator STEVENS. Have you entered into a contract on the C-5 already?

Secretary ORR. We are very close, but whether it has actually been "inked" I do not know.

Senator STEVENS. Well, the committee is informed that you signed for the C-5 procurement before we even approved the program.

Secretary ORR. I am told we have not because there is no money available to sign the contract.

Senator STEVENS. So, there is no ongoing procurement of C-5's under this.

Secretary ORR. I believe that we are unable to finalize any contract without the money Congress appropriated for it.

Senator STEVENS. As I said, we want to go into the C-5 in terms of total hearings. I am going to skip that now. But, I think you should be aware that there is substantial concern here in the committee that the CX decision we made last year has been in effect nullified by the decisions you have made on C-5.

RDF RELATED AIRLIFT REQUIREMENT

Let me ask you just one basic question, is the airlift, the requirement you are trying to fill, is that related to the RDF and the so-called Persian Gulf program?

General **Allen**. Well, they are in part, but the requirements for airlift in the study which we presented to the Congress, the so-called congressionally mandated mobility study, our driving requirement is still NATO rapid reinforcement.

Senator **Stevens**. Well, let me say, this Senator has a little problem if we are asked to increase the forces in Europe. At the same time we are supposed to increase the ability to get our forces there and maintain a whole new RDF concept for the Persian Gulf, all without any increase in support from our allies.

General **Allen**. We certainly are asking for increased support from our allies and getting some. The forces that we tasked in the case of airlift, and indeed in the case of tactical fighter units for Europe and Southwest Asia, are the same forces, that is, it is a force capability which the United States will have and can exercise as the situation demands.

But airlift, for example, is not designed to fully support, obviously, to the same level deployments in both places at once.

Senator **Stevens**. I know that Secretary Haig told the Germans that they need not be worried about any congressional reconsideration of our commitments to ground forces in Europe and all our commitments to the Persian Gulf concept. I would hope that your Department does not maintain the same feeling because I can assure you that this Senator—and I think the committee—is going to be very interested in the level of commitments we are making and our ability to maintain those in view of our current budget difficulties. We intend to go into both those, the airlift requirement and the NATO and Persian Gulf commitments in great detail this year.

ALTERNATIVE FIGHTER ENGINE FUNDS

Let me ask you about the alternative fighter engine. Last year we added $17.5 million to the engine model derivative program to permit development work on increasing the thrust of the F100 engine.

Now, does the Air Force have a requirement for a higher thrust alternative fighter engine as suggested by the Appropriations Committee? Has that been determined yet?

General **Allen**. It has been determined. That is, we do not have such a requirement.

Senator **Stevens**. Well, you do have a request here for $94.1 million for the alternative fighter engine budget. How much of that is for the F101 DFE, and how much of it is for the F100 engine?

General **Allen**. I will get the numbers straight in a moment, but the majority of it is for the F101 derivative engine. That is the engine which we are bringing along to be competitive with the F100 engine for the F-16 and possibly F-15.

Senator **Stevens**. You may want to answer this for the record, but it was our information that the F101 DFE funds were being used to initiate full-scale engineering development of that engine, while the F100 funds only permit a full-scale development of the digital electronic engine control system for the F100. If that is right, how can the Air Force coincide that decision with the specific language of the conference report which supported and directed competition in the field of fighter engines if there is a new thrust requirement?

General ALLEN. Because, as I consistently testified to this committee, and as you said in your opening statement, we do not have the requirement for the increased thrust.

The reason for the development of the GE engine and the reason we are driving forward on this thing is because of the opportunities for improved durability that the 101 engine offers, and the decreased life cycle support costs that could be engendered.

INCREASED THRUST CRITERIA IN ENGINE DEVELOPMENT

Senator STEVENS. But, is increased thrust a significant criteria in that F100 engine development phase?

General ALLEN. First, let me say, the 101 DFE engine, that is the GE engine, does have higher thrust than the F100. In our judgment that is not significant. It is also a heavier engine and the differences we do not believe are important and do not intend to consider them as important. We will do the competition between the 100 at its present level of thrust and the 101 as it is designed.

Senator STEVENS. In other words, you are telling me if you have a Ford and a Mercedes, you are telling the people who are driving the Mercedes that they should only use one-half of their horsepower in competition with the Ford.

General ALLEN. Well, if things like fuel economy and take-off weight are important, yes, that is what you would say.

Senator STEVENS. But if you were buying it for an aircraft you would buy it for the increased thrust.

General ALLEN. Not me, no, because I told you consistently that is not the criterion. The criterion is, the F100 engine has adequate thrust and lower weight, and the F-16 with the GE 101 engine does not gain any significant advantage with that. Furthermore, that is not the criterion in which we intend to invest.

Nevertheless, in accordance with the discussions that we had and the action of Congress before, we are developing in a separate activity the engine derivative programs at Pratt & Whitney associated with the F100. So, there are increased thrust developments being made there. But they are not in the same timeframe and they are not competitive, nor do we think that they have to be.

Senator STEVENS. I thought that was what we wanted, was competition, they are sole source. That is what we are talking about, is competition.

General ALLEN. Yes, sir.

Senator STEVENS. If they are not competitive, that is our problem, why are they not going to be competitive?

General ALLEN. The F101 DFE and the F100 are going to be competitive and we will be bringing that along for that purpose.

Senator STEVENS. General, how can you be competitive if you ignore thrust? Most of us are pilots, you are all pilots—of the same generation as I am, as a matter of fact—how can you ignore thrust when you get into competition in aircraft engines?

General **Allen**. The F101 engine is heavier than the F100. In the F-16 aircraft, which is the aircraft in which we will first make this examination, the effect of that increased weight just about offsets the increased thrust.

The analysis we have done indicates that it is not a significant factor even if we were interested in thrust.

But the second point is the more significant one. The reason for wanting competition is not because of the decreased performance of the F100 engine which is not valid, the F100 engine does perform as we need it to perform.

It is because the F100 engine has proved to be an expensive engine in inventory. It is not as durable as we would like. It is not as durable as we would like partly because of the way it was designed in having very hot section temperature. That has proven to be difficult to handle in materials and difficult to handle in durability.

The GE engine has lower hot section temperatures. We do not want to compound that problem by demanding Pratt & Whitney to go up to higher temperatures, they cannot do it fast, we do not believe, and maintain the durability which we have. We want to preserve that durability advantage in the GE engine and believe that the approach we have for the DFE will preserve that durability advantage which that engine has.

So, we will compete those two engines, the Pratt & Whitney engine and the GE engine, and the main aspect of the competition will be the life cycle cost comparison of the two. The thrust will not be a criterion of the competition.

Senator **Stevens**. We may go back into that a little bit in the airlift hearing, it is not relative to that. Maybe I am not understanding you, but I still read between the lines that we are not going to have competition as far as those two engines are concerned until the criteria are the same. But I will pursue it further.

PROCUREMENT OF 226 MX MISSILES

Let me ask about MX now. We supported and got the MX through last year with a narrow vote. Now we are asked to procure 226 MX missiles in this budget when the initial deployment is a hundred.

I asked the question what it would cost us to stretch out the procurement for 1 year, and I was told it would be $1 billion. I thought that referred to the stretching out of the 100 missiles. Now I see that we have 226 missiles.

Do any of you know whether the answer I got referred to a hundred missiles, or the 226 missiles?

Secretary **Orr**. I believe all three of us agree that we will procure 226. We will ultimately deploy 100. Another 108 are required for flight testing throughout the operational life of the weapon system to monitor weapon system reliability. Fifteen missiles are for aging and surveillance testing and three are spares. Additionally, 20 missiles will be bought with R. & D. money for initial

R. & D. flight test. The first one will be test fired I believe in early 1983.

Senator STEVENS. If we stretched out the timeframe for the procurement of the 226 missiles by 1 year—incidentally, what is the timeframe for delivery, is that classified, of the 226?

Secretary ORR. No; it is presumed to have an IOC—well, if I answer that it is not going to be responsive to the question. It is presumed to have an IOC of 1986.

Senator STEVENS. Well, in view of the problem of silos, would a 1-year extension be detrimental to your program as far as the procurement of the 226? Not of the 100, keep the 100 on schedule. I understand you only have a plan yet for the next 126; is that right? The 100 are going into the silos. The plan is only for 126, am I correct?

General ALLEN. The 126, sir, the additional missiles, are the total inventory of tests, depot, and so forth. The 226 number is what is required to have 100 deployed in whatever depolyment we have over, I think, a 15-year life span.

Senator STEVENS. I misunderstood that, you have to have 126 in order to have 100——

DEPLOYMENT OF MISSILES

General ALLEN. In order to keep 100 operational.

Senator STEVENS. How many are going into silos? I am just told I am off, 40 are going to silos.

Secretary ORR. That is correct.

Senator STEVENS. What are you going to do with the other 60, then, assuming that you have 226, you have 100 excess? Those figures boggle your mind, at least mine, that we have to have 226 missiles in order to have 40 to go into silos and 60 to go where? Where are the 60 going to go, are they all going to go into storage?

Secretary ORR. That has not been determined. It is expected to be determined before the 60 are delivered.

But let me say, we will never ever have all the missiles that we are buying because we are starting to fire them as of early 1983 and a number will be utilized in the test phase.

Senator STEVENS. How many?

Secretary ORR. I do not have that figure, we can get it.

General ALLEN. We can give you for the record a breakout of that 226.

Senator STEVENS. I see myself getting into the same position I got into on that ABM vote, Mr. Secretary. I voted for it, talked to the administration that was seeking it, and found out that it was a bargaining chip. The ABM vote turned out to be a bargaining chip for the last SALT negotiations.

Now, is this a bargaining chip for SALT negotiations, and if it is, how inflated do we have to make it?

Secretary ORR. When you are talking about SALT negotiations you are well ahead of my pay grade. But it was never intended by the Air Force to be something to be put forward and be struck down.

Senator STEVENS. Well, if we do not have the deployment potential for 186 of the 226 we are ordering now, I want to get some figures. What are we going to do with them, where are we going to store them, how many are we going to fire and test and really, what is going to happen if we delay this by at least 1 year, do we know?

The estimate you have given us, it costs us $1 billion in procurement, but does it cost us to begin in terms of storing them and caring for them, and maintaining them and protecting them if we have them a year or two before deployment is ready?

I am not sure that this committee is ready to authorize the funds for the 226 unless we get some firm answers. I may be redundant of what the Senator from North Dakota said in my absence, I assume he went into that.

Could you answer those questions for me for the record?

Secretary **Orr**. Certainly.

[The information follows:]

Need for 226 Missiles

The MX program calls for 226 production missiles. 100 of these will be deployed for operational capability—40 in Minuteman silos and 60 in a long-term survivable basing mode. 108 of the missiles are for a 15 year test program to comply with JCS guidance for maintaining confidence in missile reliability. The remaining 18 missiles are to be used as spares and for analyzing the effects of aging on the missile and its components.

Including the facilities construction costs, it will cost approximately $26 million to store, maintain, and protect the non-operationally deployed missiles during the life of the program. If the program is delayed a year or two, then the additional storage and protection cost is minimal compared to the $26 million.

IOC

Senator **Stevens**. How firm is that 1986 IOC date?

Secretary **Orr**. That at this point still remains firm.

Senator **Stevens**. That was the IOC for the MPS, was it not?

Secretary **Orr**. Yes, sir.

Senator **Stevens**. But we do not have a plan, it is not anywhere as far along as the MPS was when the plan was canceled.

General **Allen**. The plan for the first 40 is in silos, and we are keeping the missile development and production on the same schedule as before.

Senator **Stevens**. Is any money to be spent under this bill for the MPS?

Secretary **Orr**. No.

Senator **Stevens**. Is any money to be spent in any way that would be compatible with it?

General **Allen**. There was a discussion with Congress, based on language or correspondence from the Senate Armed Services Committee, in which it was resolved that for a defended system that we should examine some forms of deceptive basing. The reason for that is that in conjunction with ballistic missile defense some form of mobility is required either for the radars or for the defensive missiles of the BMD system, or possibly for the ICBM's.

The Senate Armed Services Committee wanted to be sure that we did not ignore that. The answer was, we would look at deceptive defended basing. But the MPS approach, as we earlier defined it, will not be examined.

MINIMUM FUNDING REQUIRED IF IOC DATE SLIPPED

Senator **Stevens**. Your R. & D. request for 1983 for the MX is $2.75 billion. The missile procurement is $1.49 billion, roughly $1.5 billion.

If we decided to make the IOC 1987, could you tell me now—if you cannot we would like to have it for the record—what would be the minimum funding required for the R. & D. request, and what would be the minimum funding for procurement? I am really asking you how the figure $2.75 billion changes and how would the figure $1.5 billion change if we decided on a 1987 IOC.

Secretary **Orr**. We will provide that.

Senator **Stevens**. Could you tell us in presenting your existing contracts what is inconsistent with that, are there any extra costs we are going to run into by stretching that out?

[The information follows:]

Minimum 1983 Funding for MX

Even if the IOC were delayed one year until 1987, the $2.75 billion RDT&E request should not be reduced. It is important to continue missile development on the current schedule and to vigorously initiate R&D into the long-term basing options.

Delaying the procurement program one year would mean moving the $1.49 billion procurement request into 1984. This should not add significant extra costs to the existing R&D contracts if present development schedules are maintained. Of course, total program cost growth could be expected to occur because the MX IOC would slip by one year.

SECOND-PHASE BASING DECISION

Senator **Stevens**. When do you expect the decision for the second-phase basing, what is the date for that?

Secretary **Orr**. July 1983.

Senator **Stevens**. I have to get a little provincial here because every time I go home I run into the questions—I presume you have heard someone in Salt Lake City suggesting putting the MX in Alaska. [Laughter.]

Senator **Johnston**. Along with the nuclear waste. [Laughter.]

Senator **Stevens**. We are getting caught in a controversy—and I am not going to take it personally as I see what is happening. But can you tell me, is that under active consideration, the changing of the basing options so that Alaska would be one area for deployment of the MX? Is there anything active about that?

General **Allen**. There is nothing active, and I trust that will not be a disappointment to the citizens of Alaska who, from my personal experience, are more dedicated to the defense of this country than most other citizens. They are on the frontier now. I know they wish to be protected.

Senator **Stevens**. I tell you, if the Air Force decided that was the place to put it and you could defend that decision, there would be a lot of us who would defend it. But I want to know whether you are serious about it before I get involved in this argument.

General **Allen**. No, there is no serious examination at all under way, no serious proposal.

Senator **Stevens**. The whole proposal is for a deep-basing in the Brooks Range Area. I understand there is something under review.

General **Allen**. We are looking at deep-underground basing, and it is conceivable that somebody has looked at that. But the information available to me is that would not be a preferred choice.

Senator **Stevens**. Well, if it gets to that point I would be happy to know so I do not stick my foot in your mouth. [Laughter.]

Secretary **Orr**. That is an encouragement for us to let you know.

Senator **Stevens**. As I say, if you say that is in the national interest and you can prove it to me, I will go along. I think wherever it is it has to go, it has to go, that is all there is to it. Someone has to be prepared to take it.

Senator **Rudman**. We may say, we have 100 missiles, 50 States, we put two in each State. [Laughter.]

Senator **Stevens**. There are a lot of States that will not take any.

ELIMINATION OF BASING OPTIONS

I do think we have to look at this from the point of view, again, about some of the expenses. You have $310 million for MX long-term basing options. Now, what would be the request if Congress took the action to eliminate some of those options? You may have forgotten, but let me remind you that Congress passed on three occasions, I think, which forbid the use of funds for the sole option of the ICBM.

Now, if we take the action to say that we do not want air mobile or deep basing, or defendent deceptive or whatever options, can you tell us, is this $310 million associated with any particular option; or could we say if we eliminated deep basing or defend deceptive options that we could eliminate *x* million from that request?

Secretary **Orr**. Yes, sir, I believe that would be one option. Continuous patrol aircraft, $74 million; deep basing, $127 million; associated with ballistic missile defense, $109 million.

I might say—and I am sure you are aware of this—that that part for ballistic missile defense in the Air Force budget is small compared to the Army which has the ballistic missile defense program.

Senator **Stevens**. I am glad to have that in the record. I am not prepared to suggest it yet, but perhaps the committee may want to look at that option.

How firm are your cost estimates with regard to the deep-underground and air and mobile basing options?

Secretary **Orr**. I do not think they are firm at all. I do not think we have begun to look at that. For instance, the continuous patrol aircraft is in little more than the "green" stages and I would not want to even estimate where we look.

ALCM TESTING PROGRAM

Senator **Stevens**. All right, let us go to the air launched cruise missile, then. I understand that the testing for ALCM is behind schedule; is that right?

General **Allen**. It is not seriously behind schedule. We are, in general, satisfied with the testing progress.

Senator **Stevens**. How firm is the December 1982 IOC that I have been told about?

General **Allen**. We are still on schedule, I believe. Although it is tight, we think we can make it.

Senator **Stevens**. When will we have an analysis of the ALCM testing program that will give us reliable analysis of the IOC date?

General **Allen**. I do not know the date, but I would think it would be soon. I would think in the next few months.

Senator **Stevens**. Well, obviously with the procurement rate of ACLM's, if we are going to have further testing the question is, what is the level of ALCM in the budget?

Secretary **Orr**. General Patton says 440 units.

Senator **Stevens**. That is related, am I correct, to the analysis of the ALCM testing program. Are you going to go ahead and acquire them without regard to the analysis of the testing program?

General **Allen**. Sir, I am a little bit confused about the concern you are expressing on the test program. There have been some difficulties in the ALCM program but in general the test program has proceeded satisfactorily. We did meet this date which we set for ourselves associated with the first alert capability.

Our milestones have been met. There was a concern about certain components here a few months ago, that has been basically resolved. There is still some concern about the supporting software and other support activities, and that will be a bit of a limiting factor. But it will not degrade our ability to make the IOC.

So, although it is tight and we are working off problems as we go along, we are confident that we are on a solid path and that we will make the dates in our program. The procurement is fully justified.

Senator **Stevens**. I hope so, I am a real ALCM supporter. I think we ought to find some way to make a requirement that all private jets have the capability of having ALCM capacity, so that we can put them to work if we are getting in trouble. I do not think there is any real Defense Department analysis of literally thousands of air-launched missiles.

But I do understand there is a survivability question now, am I incorrect?

General **Allen**. No, sir, I do not think, again, the problem is alarming, but it is one which causes us not to question this ALCM readiness to enter production or to question its survivability.

It is enough for us to say there are some improvements that are needed and we are looking at down-stream block modifications that would give us those improvements.

Senator **Stevens**. Is there any competition left in that ALCM program, or is that sole source now?

General **Allen**. Well, there was a competition between General Dynamics and Boeing, and Boeing won that competition and is in production. We intend to compete future modifications of the missile.

Senator **Stevens**. All right.

SIZE OF ORIGINAL AF BUDGET REQUEST

When Secretary Weinberger was here we were told that the 1983 budget had had a considerable reduction, and he cited a $5 billion outlay reduction had already taken place before this budget was presented to us.

How much of those reductions apply to the Air Force, and what were the items that were deleted?

Secretary ORR. Well, I can tell you right offhand that we are not happy with our reduction of either F-15's or F-16's, they were obviously deleted. We had originally gone in with a request for a larger number of KC-135 reenginings. Can you think of some of the other items?

General ALLEN. Those are the principal ones, but we had hoped to obtain greater economies and efficiencies through higher rate production of items.

Senator STEVENS. What was the size of the request that you sought in the reengining of KC-135's, do you have that? If you do not, if you can give it to us for the record.

Will you give us those items for the record? I am sure the Secretary understands if this committee decides to eliminate something else, we might put back in some of the things that you sought in the first place.

Secretary ORR. I will correct this in the record if I am wrong, but it runs in my mind that our hoped-for production of F-16's was 180, and it came out to 120. With the F-15 we requested only 42 due to fiscal restraints and strategic priorities, but will build the production rate to 60 in fiscal year 1984. Both could be procured at higher, more efficient rates.

[The information follows:]

SIZE OF ORIGINAL AF REQUEST BEFORE REDUCTION

The Air Force originally sought $613.6 million for the KC-135/CFM56 reengining program. The Air Force request was not affected by the $5 billion outlay reduction. The $613.6 million Department of Defense budget submission was identical to the funding provided in the President's budget.

ECONOMY IN QUANTITY

Senator STEVENS. Was there efficiency of scale in terms of procurement with the units that you are getting, do you get lower costs if you get a large block?

Secretary ORR. There is a "knee" in production where we reach an efficiency peak, and I think this is what determined the quantities in the KC-135, the F-15, and F-16. There would have been additional economies, obviously with greater quantity.

Senator STEVENS. Do you have any more questions?

Senator RUDMAN. I have one question, but I can save it.

Senator STEVENS. Go right ahead.

Senator RUDMAN. I want to return to the question the chairman asked about the vulnerability of the cruise missile. I am familiar with some of those evaluations.

I am sure you are aware that there is a group within the Department of Defense that is looking at Soviet defenses and their countermeasures and their ECCM; they are looking to the late 1980's.

My question is, What kind of close formation do you have between the cruise missile program and the people doing that work, this information would be very significant in terms of survivability of the cruise missiles in the late 1980's?

General ALLEN. They are very close.

Senator **Rudman**. I think I would probably want to talk to you about that in your office or mine, but certainly not here.

General **Allen**. Certainly.

JUSTIFICATION FOR B-1B

Senator **Rudman**. I want to come back to the question Senator Johnson asked you about the B-1B. In testimony you gave us last year, you described from the Air Force's point of view three specific missions. I only heard you mention one of them this morning.

I want to refresh your recollection about the other two and tell me whether or not your thinking has changed on that.

Two of the other justifications given to us on the B-1B at that time were (a) that there were certain Soviet command control targets that were of a nature in terms of hardening that conventional warheads delivered by our missiles would be incapable of destroying, and the B-1 in fact could. Is that still your position?

General **Allen**. Yes, sir.

Senator **Rudman**. The second criteria you used at that time was that in terms of carrying weight missiles as compared to the B-1B, there were certain strategic targets that do not have sufficient weight carrying in our missiles, but we would in fact with the B-1B. Is that still correct?

General **Allen**. Yes, sir, that is correct.

ENGINE THRUST VERSUS DURABILITY

Senator **Rudman**. The other question comes back to an earlier discussion you had with the chairman. My understanding is that Pratt & Whitney presently supplies the engines for the F-14, the F-15, and the F-16.

General **Allen**. That is correct.

Senator **Rudman**. In order to prevent that from being a long-term sole source requirement, General Electric's derivative engine is being considered as competition for replacement to compete against the current Pratt & Whitney engine which is in the F-14, F-15, and F-16.

General **Allen**. Yes, sir. The one in the F-14 is a different engine presently.

Senator **Rudman**. In fact the increased thrust requirement which Pratt & Whitney now says they can deliver turns on durability in those aircraft.

General **Allen**. Correct, sir.

Senator **Rudman**. Right or wrong, that is your position.

General **Allen**. Yes, sir, and I would like to just add one more word to that.

The alternative that we would face is to direct Pratt & Whitney to emphasize a higher thrust engine. If they were to do that—we are supporting them in doing some off-line work in that direction—but if we were to direct them to do that for competition purposes it would lead in exactly the wrong direction, that is, they would go to higher hot temperature sections and perhaps degrade the durability of the engine.

We like the thrust of the F100 engine. What we do not like is the maintenance requirement.

Senator **Rudman**. You do not want to pay for more thrust at the expense of durability.

General **Allen**. Yes, sir.

NUMBER OF MX'S FOR TESTING USE

Senator **Rudman**. There was one comment in one of the chairman's questions in terms of how many of these MX's we are going to use for testing purposes.

I believe what you submitted to us indicates the first test at Vandenberg in January 1983 with a total of 20 of these used for testing; is that correct?

Secretary **Orr**. That could well be, I do not have that figure in front of me.

Senator **Rudman**. Will you supply that for the record?

Secretary **Orr**. I will. I must have misspoken, I thought it was December of this year.

Senator **Rudman**. Thank you, I have no further questions.

Senator **Stevens**. Thank you.

[The information follows:]

MX's Used for Testing

The first test flight of an MX missile is planned for early 1983. We are currently planning it for January 1983. There will be 20 Research and Development flight tests followed by 36 flight tests to establish operational planning factors and 6 flight tests per year thereafter to monitor changes in weapon system performance.

AIR FORCE 5-YEAR PLAN

Senator **Stevens**. Mr. Secretary, at the time we had to go to the floor last year there was considerable discussion of the Air Force's 5-year plan, or the total defense plan for 5 years. We have 3 years of the 5-year plan that has been presented to us in classified form.

Before we get to the floor, are we going to have the next 2 years?

Secretary **Orr**. Mr. Chairman, that is a question I cannot answer because that goes through the Secretary of Defense and is determined by him.

Senator **Stevens**. We were told, there was a statement presented to us that indicates the administration was entirely in accord with the concept that there was an existing requirement for the 5-year plan and it intended to have a 5-year plan, and we would continue to update the 5-year plan. But we still only have 3 years.

Secretary **Orr**. I am not aware of that, I will look into it with the Secretary of Defense. Those determinations are made at that level.

Senator **Stevens**. It came up in connection with your budget, that is why we are interested in finding out where we are going with the MX's, with the bombers, the big items in the Air Force procurement.

Do you have a 5-year plan of your own?

Secretary **Orr**. Yes, sir, we have an outyear 5-year plan, some of which we talked about today. It is shown in the amendment. It is shown in our procurement in fighters, for example, the F-15's and F-16's. We have other elements in the program.

Senator **Stevens**. Is it available for our inspection?

Secretary **Orr**. I would have to ask the Secretary of Defense, I cannot answer that question. That goes through him.

Senator **Stevens**. I would appreciate if you would let us know whether we have access to that and if not, why not.

[The information follows:]

Air Force 5-Year Plan

The Air Force has previously provided the committees with a classified document that displays major systems procurements like MX, bombers, fighters, and other major items. The data includes cost estimates through fiscal year 1987 and cost to completion. The document is part of the Air Force Budget justification material called "Congressional Data Sheets."

SPACE SHUTTLE PROGRAM

Senator **Stevens**. With regard to the Space Shuttle, the Senator from New Mexico is conducting a hearing elsewhere, but I am sure he would pursue it.

What is the Air Force's position with regard to the Space Shuttle program and are you coordinating with NASA in terms of your Air Force budget for the Space Shuttle, space launch support, a space test program?

Secretary **Orr**. Let me say in general, the coordination with NASA is better than it ever has been, and that is in large measure due to the fact that the former Secretary of the Air Force is now the Deputy Administrator of NASA and he has a great understanding of the problems on both sides.

He and I work very closely together. We have made substantial improvements in trying to keep down the cost overruns which have occurred, which are serious, by working together and eliminating a great number of change orders which were coming through from Kennedy to Vandenberg. There will be, and there will continue to be, differences of opinion between us, probably, as to the amount we should pay NASA for the DOD space load on the Shuttle. Those are not serious differences, those are negotiating type of differences which occur between government agencies.

But I like to think in general there is good coordination.

Senator **Stevens**. Well, is it true that you are developing an upper stage phase that NASA has already developed as far as the Shuttle is concerned?

Secretary **Orr**. Let me say a word about the upper stage and then ask the General to. Originally, both NASA and the Air Force agreed upon a stage, the IUS built by Boeing.

We, in general, were going to use one IUS, they had plans to make a planetary variant to carry their planetary missions. NASA determined that they wanted to drop out of the IUS stage at Boeing and did so, which has resulted in substantial cost increases to us because the program is now being carried at a reduced number of procurements and that will be our problem.

Subsequently, NASA has been interested in Centaur, it is a liquid fuel upper stage. The reason they were not interested in something like that earlier, they had made an internal determination they did not want a liquid fuel upper stage inside the Shuttle. But their safety considerations apparently changed and that is acceptable now.

They approached us on coordinating with them. The problem became that it called for us to remake our loads to a different bus, a different carrying facility. We did not think we could do it in the time frame that they needed their Centaurs.

So, we are still with the original IUS which is adequate for our needs for many years to come. They are pursuing Centaur which will carry a much greater load and which in out years probably will be used by DOD.

SUBMITTED QUESTIONS

Senator STEVENS. We will probably have additional questions to submit from other members of the committee and some of those I did not get to. I would appreciate it if you would respond to those, particularly those that relate to the priority items, as far as items that are being considered for reduction.

We appreciate your testimony.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

INCREASES IN R&D AND PROCURMENT

QUESTION: Research and Development and Aircraft Procurement both rise about 26 percent in current dollars. Missile Procurement jumps up by 49 percent in terms of budget authority. The percentage increase in outlays for the two procurement accounts is even greater — 35 percent for aircraft and 42 percent for missiles. Can't we curb some of these huge increases without impairing the development and acquisition programs significantly?

ANSWER: No. The FY 1983 RDT&E budget request actually increases about 20 percent in real growth. This is due primarily to the fact that five major R&D programs - M-X, B-1, Space Transportation System, Space Defense (ASAT) and AMRAAM - all peak in FY 1983. We expect that the FY 1984 and FY 1985 Air Force RDT&E budget request will actually decline in terms of real growth.

The real growth in the Aircraft Procurement request is about 20 percent. The increase for Missile Procurement is heavily influenced by the first procurement of the M-X Missile which accounts for $1,497.1M of the FY 83 request. If this were excluded, the real growth for the balance of the Missile Procurement appropriation would be about 21 percent.

FORCE EXPANSION INCREASES

QUESTION: We recognize much of the development and acquisition increase is related to such items as the B-1 and the M-X, but what about other increases, particularly those related to force expansion?

ANSWER: In the tactical area, the F-15 R&D increases $93 million to incorporate new capabilities and to retrofit system improvements to aircraft already in the field. The F-16 R&D increases $29 million to continue radar improvements, AMRAAM integration, and to start testing of the improved radar. The Next Generation Trainer R&D increases $38 million to continue airframe and engine testing, and to start building test aircraft.

In other areas of R&D, there is an increase of $86 million for the technology base. Of this increase, $30 million is for defense research sciences and $36 million is for inflation for the remainder of the technology base. Advanced technology development increases by $99 million. Increases for the Space Laser Program of $40 million and advanced radiation technology of $20 million account for most of this increase. Classified programs account for nearly all the increased R&D expenditure in intelligence and communication.

In the area of defense wide mission support, five space related programs account for most of the $202 million increase.

NUMERICAL PLATEAU OF TACTICAL FIGHTER WINGS

QUESTION: We are currently building toward an objective of 40 tactical fighter wings in 1986 and 44 wings by 1990. How did we arrive at these force levels? Assuming timely replacements, will this acquisition program bring us to some sort of numerical plateau?

ANSWER: The tactical force structure goal is based upon the need to maintain our strength in the face of a Soviet threat which continues to expand in both numbers and quality. We have a continuous planning process which reviews the requirements presented by the theater CINCs, the commanders of the tactical air forces and the JCS to fulfill our military objectives against the present and projected military threat. These needs are in turn evaluated against the current and projected fiscal constraints to arrive at realistic force planning objectives such as the goals you note. The 40 wing goal for tactical fighter forces is a fiscally prudent objective first identified in the late 1970s which we expect to achieve by 1986. In light of the unabated growth of Soviet military forces, our increased commitments in Southwest Asia, and continuing fiscal constraints, we plan to build toward a 44 tactical fighter wing force by 1990.

C-5N FULFILLING AIRLIFT ROLE

QUESTION: Tell us how you see the C-5N fulfilling the airlift role for which the Air Force had selected the McDonnell Douglas C-17. Will it do the job, or will we have to turn to a new airframe development sooner or later?

ANSWER: The C-5N (designated the C-5B) was selected to satisfy the urgent near-term need for additional outsize airlift capability. We recognized that the C-5 does not entirely fulfill all of the airlift roles defined in the C-X Request for Proposal (RFP), such as sustained operations to and on small austere airfields, and Low Altitude Parachute Extraction System (LAPES). Aerial port of debarkation (APOD) saturation inherent with current intertheater airlift and the significant requirement for an outsize intratheater airlift capability leads the Air Force to continue development of the McDonnell Douglas C-17 with its direct delivery outsize capability as a candidate to meet these requirements as well as providing a long term replacement aircraft for the C-141 and some C-130s.

MANEUVERABILITY OF C-5N

QUESTION: How well will the C-5N perform the intra-theater airlift mission, for instance? And how well will it maneuver on small runways?

ANSWER: The C-5 is not being procured to perform the intratheater airlift mission.

The Army needs to rapidly move forces around the battle area; to land at available forward, austere airfields; to unload and load quickly; and to have items delivered by airdrop or Low Altitude Parachute Extraction (LAPES) methods when airfields are denied. The C-5 cannot accomplish all of these tasks.

The C-5's limited general maneuverability makes it unsuitable for small, austere airfields. The C-5 is a highly capable aircraft, but experience with the C-5 has taught us that operating large aircraft into small, austere airfields is not practical.

REWINGED C-5 SHUTS OFF COMPETITION

QUESTION: How do you answer the criticism that a rewinged C-5 shuts off competition not only on the prime contract but on components such as engines?

ANSWER: The Air Force's recommended airlift program reflects the results of extensive competition among a number of alternatives (C-17, C-5, B747, DC-10, KC-10, expanded CRAF enhancement, etc). The C-5B was chosen specifically to reduce our serious near-term intertheater outsize airlift shortfalls. We have reviewed the legal requirements associated with DOD procurement and have concluded that the decision to acquire C-5Bs in fully consistent with both law and regulation, and that contracts may properly be entered into without re-competition.

A competitive program to produce the C-5 would require 18 - 24 months delay in contract award. Should an aircraft manufacturer other than Lockheed be selected, even more time would be required for tooling set up, testing, and fabrication. The urgency of near-term airlift requirements, the opportunity to avoid duplication of engineering and tooling costs which have already been paid by the government, and the substantial competition which has recently occurred justify proceeding on contract with Lockheed.

TF-39 engines for the C-5B will be provided to the Air Force by Lockheed as contractor-furnished equipment. Logistics supportability concerns dictate a common engine for the entire C-5 force. Further, use of an engine other than the TF39 would require RDT&E funds and would delay delivery of the aircraft.

747s AVAILABLE FOR PURCHASE

QUESTION: If you think it's wise to turn away from the expensive development of a new airframe for U.S. military airlift needs, why don't you turn still farther and go to commercial aircraft that are built and available for conversion? We understand, for instance, that existing 747 transports are available for purchase and could be bought and converted at nearly half the cost of a new C-5N. Did that option figure in your airlift policy decision?

ANSWER: The C-5 was not chosen solely because there is no development program. The overriding consideration in the choice between the C-5 and C-17 was the conclusion that a significant airlift shortfall exists now. Consequently, the objective is to increase airlift capability as quickly as possible. The Air Force originally recommended the C-17 over the C-5 when funding constraints resulted in delivery profiles that were not significantly different for the two aircraft. Under those circumstances, the C-17's greater military utility (including air drop, Low Altitude Parachute Extraction System, combat on-off load, as well as intratheater capability) and lower operating cost dictated that it was the best choice. Given the opportunity to increase funding, the Air Force selected the C-5 because production deliveries could be made earlier than under the C-17 program.

Procurement of off-the-shelf Boeing 747 freighters was considered in our near term airlift decision. The 747 freighter is a superb airlifter with an established record of achievement. It is not, unfortunately, a good carrier of outsize equipment. In addition, the high floor (16 feet above the ground) and the need for large, cumbersome ground handling equipment make loading and unloading the 747 much slower than the C-5 with roll-on/roll-off capability.

C-5 WING MODIFICATIONS

QUESTION: The Air Force is currently subsidizing the C-5 flying hour program in order to maintain competitive rates for airlift users. In part, the subsidy is required because the C-5 is restricted to 33% of cargo capacity by wing deficiencies. Presumably the C-5 wing modifications will improve the utilization rate of the aircraft. Will the subsidy be required beyond FY 1983?

ANSWER: Yes, but as C-5 aircraft wings are modified the Allowable Cabin Load (ACL) subsidy will be reduced. The C-5 ACL subsidy is programmed to be eliminated after all the wings are fixed in FY 87. However, a level of airlift training funding will still be required in the outyears because the revenue generated in conjunction with transporting peacetime cargo will be insufficient to satisfy the readiness flying hours required for adequate wartime training. Several factors contribute to this training requirement, including the added capability produced by the fixed C-5, the stretched C-141s, and the acquisition of additional C-5s.

R&D COST FOR C-5 WING MOD

QUESTION: You are spending nearly $7 million this year and you're budgeting about $4 million in 1983 for C-5 wing modification R&D. After all these years and all this expense, why do we still need to spend so much on R&D for this backfill program?

ANSWER: The Air Force has requested $6.8 million in FY 83 and $1.5 million in FY 84 for C-5 wing mod RDT&E. These funds are principally to complete damage tolerance/crack propagation testing on the fatigue article wing. Upon completion of this testing, a residual strength test and teardown inspection will be performed and a final report prepared.

C-5 WING PROBLEM COST TO DATE

QUESTION: What has been the total cost to date of the C-5 wing problem? Give us the entire expense — R&D, actual re-winging, subsidizing low performance, everything. Separately, please summarize total development and production costs of the C-5A. Please provide all figures in current and constant 1983 dollars.

ANSWER: The wing modification costs include the R&D for the wing modification; wing modification kit procurement and initial spares; and Operation and Maintenance (O&M) for wing modification installation, required extra maintenance inspections, and the Available Cabin Load (ACL) program.

	Current Dollars	Constant 1983 Dollars
	($ in Millions)	
RDT&E	169.0	222.5
Procurement	628.1	617.6
O&M	822.3	914.4

The total development and production costs of the C-5A were:

	($ in Millions)
RDT&E	$1,025.6
Procurement	3,403.3
Military Construction	16.3

SPACE WEAPONS/SOVIET THREAT

QUESTION: We have heard differing opinions recently regarding the threat of Soviet space-based weapons. How do you assess the threat of Soviet space weapons?

ANSWER: The Soviets (deleted).

They have had an operational ASAT interceptor (deleted) capable of attacking all low-altitude satellites (deleted). We project the Soviets will launch a (deleted).

U.S. KEEPING PACE WITH SOVIETS

QUESTION: Where do we stand now in the area of space weapons and in defending against them? Are we making any effort to keep pace with Soviet developments?

ANSWER: The Air Force is developing a non-nuclear, air-launched antisatellite (ASAT) capability to counter the threat represented by Soviet space systems. This missile system will be operational in FY (d) and consists of a modified Short Range Attack Missile (SRAM) first stage, an ALTAIR III second stage and a Miniature Vehicle (MV) warhead. The kill mechanism is (deleted).

The Air Force is also funding a vigorous program to enhance the survivability of our space systems. We have already taken measures to improve the survivability of certain critical space systems such as (deleted). The DOD will continue its search for space capabilities that can contribute to our defense posture in a cost effective manner.

MAVERICK/DELAYED PRODUCTION

QUESTION: A major system that's having trouble going from development to production is the IR Maverick. We understand production has been delayed and that maybe you'll only be building a limited number for continued testing and analysis. What's the situation?

ANSWER: The Air Force intends to continue the IR Maverick program at a slower pace. Our testing indicates it is operationally effective against the rapidly growing armor threat. However, we are not completely satisfied with the demonstrated reliability of the missile. Engineering solutions have been proposed which should resolve our reliability concerns, but they have not been fully tested. Rather than going ahead with our planned production schedule, we decided to slow the pace to about one half of what was planned until we can validate the reliability solutions.

SUBMITTING OF REVISED ESTIMATES FOR MAVERICK

QUESTION: Why can't we effect substantial reductions in your procurement funding for the new Maverick? Do you plan to submit revised estimates? When?

ANSWER: The IR maverick restructured program will result in a reduction in procurement funding FY82 and FY83. Initial procurement funding estimates (weapon system and initial spares) are available and presented below.

	FY 82	FY 83	FY 84
	prior/new	prior/new	prior/new
Quantity	490/200	2560/1335	4600/3015
Funding ($M)	235.2/220	353.1/278	468.7/469

New estimates for FY82 indicate no significant changes in nonrecurring costs, because all the overhead engineering and most of the hardtooling development must be accomplished to establish the initial production capability. Recurring costs in FY82 drop only slightly because of higher cost estimates for the new profile of 200 missiles as compared to the priced option for the original buy of 490 missiles.

In FY83, there is a significant decrease in procurement cost resulting from the decreased quantity. Shifting the work associated with increasing production capability to FY84 is the primary reason for a cost reduction in FY83. This could be done because a higher production rate is not reached until FY84 under the restructured program.

Due to the work moved from FY83 to FY84, as well as lower production efficiency caused by the reduced build profile, the FY84 costs have not decreased.

PROBLEMS TO BE RESOLVED

QUESTION: Where do you stand on getting the bugs out of the IR Maverick? What are the remaining problems to be resolved, and what is your new production goal?

ANSWER: We have made excellent progress in resolving problems with the IR Maverick. As of 26 Feb, we had experienced only 26 maintenance failures during the 232 hours the missiles operated in development and operational testing. These failures included the four which occurred during launches. Of the 26, fixes have been designed for 19 and verified for 14. Verification testing of another 5 fixes is currently underway. Work is continuing to design fixes for the remaining 7 items. We will have the fixes resolved prior to production deliveries.

Our production goal of 60,664 missiles remains unchanged. We reduced the FY 82 buy and plan to reduce the FY 83 buy to approximately one half of what was previously planned. We expect to go to full rate production with the FY 84 buy. This approach allows us to see how low rate production missiles are working before we commit to full rate production.

ABRES (ASMS)/R&D DOWNGRADING

QUESTION: Mr. Secretary, last year Congress added $51 million to the Advanced Ballistic Re-Entry Systems (ABRES) program, now called ASMS, to permit accelerated research and development. Thus far this year, the Department is planning to reprogram substantial funding out of this program, part of it for deep basing. Why are you downgrading this effort?

ANSWER: Our intent is not to downgrade ASMS efforts, but to tailor and pace them to concrete strategic ICBM force needs. In FY 82, we have applied the $51 million added by Congress to support ICBM advanced basing evaluations and transition of the Advanced Ballistic Reentry Vehicle (ABRV) to the M-X program.

These important efforts are within the Advanced Strategic Missile Systems program charter and involve no reprogramming of funds from ASMS to the M-X program element. The remainder of the added FY 82 funds are believed to be more productively spent on a classified defense related program, therefore a reprogramming of $12 million is proposed for that purpose.

INTEGRITY OF ASMS BUDGET

QUESTION: Aren't there other programs in the Air Force budget that can be used as sources for reprogrammings? We are concerned about the integrity and stability of the ASMS budget?

ANSWER: We continuously review programs to determine if an excess or shortage of funds exist. The use of $12 million ASMS funds as a source for reprogramming resulted from a review of activities planned for FY 1982 which identified those funds as excess to program requirements.

FUNDING OF ABRES/ASMS

QUESTION: Why is ABRES/ASMS funded at only $49.7 million in FY 1983?

ANSWER: Funding has been reduced in FY 1983 due to the resolution of many key advanced development issues for major reentry systems, including the Advanced Ballistic Reentry Vehicle (ABRV). This work has given us a solid base to support future reentry weapon developments.

This reduction may well be short lived. The Advanced Strategic Missile Systems (ASMS) program, which includes the former ABRES efforts, is beginning a sizable ABM advanced development program for M-X and Minuteman III and is contributing to advanced ICBM basing work. These efforts are the most important and nearest term ICBM advanced development needs within the ASMS program.

In addition, we are currently reviewing other ballistic missile advanced development objectives and, once long-term basing and protracted war issues related to ICBMs are better understood, we expect to focus on development of those specific missile subsystems identified as most essential.

B-1B PROCUREMENT

QUESTION: The Air Force has $1.6 billion programmed in the current year to begin the production of B-1B strategic bombers, and nearly $3.9 billion is budgeted for FY 1983 to step up production. Eight aircraft are involved. Where do you stand now on initiating production of the one aircraft this year? Are you on schedule? Are there any hangups?

ANSWER: Overall, activities for the first production B-1B are progressing ahead of schedule and all associate contractors are working diligently to preserve that schedule advantage. We will meet our schedule within the specified cost providing Congress appropriates the budget in the amounts requested and approves the required reprogramming.

OBLIGATED TO DATE

QUESTION: What has been obligated and expended to date on producing the first B-1B? What is programmed for the balance of the year?

ANSWER: Procurement (3010) funds obligated/expended on producing the first B-1B aircraft as follows:

Procurement (3010) Funds*
(FY 82$ in Millions)

	February 28, 1982	Projected through September 30, 1982
Obligated	918.5	1407.0
Obligated (not expended)	916.9	1277.2
Expended	1.6	129.8

*Assumes approval of FY 1982 B-1B reprogramming request

1983 SCHEDULE AFFECTED

QUESTION: To what extent will the pending reprogramming proposal to shift procurement dollars into research and development affect the 1983 schedule?

ANSWER: If the proposed reprogramming request is approved, currently scheduled B-1B Full Scale Development and production activities for FY 1983 will remain unchanged.

The B-1B reprogramming action proposes to realign funds within the FY 1982 B-1B appropriation. Specifically, it will restore FY 1982 RDT&E funding to the requested level of $471 million by transferring $179.1 million from the B-1B's portion of the FY 1982 procurement appropriation; the action also realigns the remaining B-1B procurement funds to provide an additional $30 million for advanced procurement.

The proposed realignment of B-1B FY 1982 funding will be offset by deferring the procurement of one B-1B aircraft from FY 1982 to FY 1984. The resulting B-1B procurement schedule, with reprogramming, will be one aircraft in FY 1982, seven aircraft in FY 1983, and ten aircraft in FY 1984 (vice the previously planned profile for those years of two, seven, and nine aircraft respectively).

The aircraft delivery schedule will not be affected; therefore, the B-1B IOC of 1986 remains unchanged if the reprogramming request is approved.

1983 BUDGET ESTIMATE ADEQUATE

QUESTION: Is your 1983 budget estimate for B-1B production adequate in view of the realignment of 1982 dollars?

ANSWER: The number of B-1Bs procured in FY 1983 (seven) is unchanged by the proposed reprogramming. If the B-1B reprogramming request is approved, the current FY 1983 budget estimate for B-1B production will be adequate to accomplish the scheduled production activity.

CHANGES REQUIRING REVISIONS

QUESTION: Is your 1983 budget estimate for procurement still valid? Or have any changes occured that will require revisions?

ANSWER: The FY 1983 budget estimate for B-1B procurement has previously been adjusted based on the proposed B-1B reprogramming action and accurately reflects the planned production activity in FY 1983 necessary to preserve the program schedule and cost goals.

IOC TARGET FIRM

QUESTION: How firm is your 1986 target for initial operating capability with the B-1B, and how firm is your $20.5 billion total program cost estimate?

ANSWER: The Department of Defense remains committed to both the 1986 Initial Operational Capability (IOC) and the $20.5 billion (FY 81$) budget estimate. Rigorous management and cost control procedures have been implemented to ensure these goals are met.

If the proposed B-1B FY 1982 reprogramming action is approved and with continued Congressional support, we are confident that both the 1986 IOC and the acquisition of 100 B-1B aircraft will be achieved within $20.5 billion (in constant FY 1981 dollars) budget estimate.

B-1B R&D

QUESTION: How much of this year's B-1B R&D request is for work on radar cross section reduction and improvement of its electronic countermeasure's capability?

ANSWER: The RDT&E request for the B-1B in FY 1983 is $628.4M (FY 81$). Of that figure, $163.1M (FY 81$) is allotted for development of the offensive and defensive avionics.

A precise breakout of FY 1983 developmental funds allocated for improving the B-1B's electronic countermeasures capability will be available after AIL (defensive avionics) and Boeing (offensive avionics) conclude their respective Full-Scale Development contract negotiations, expected in April 1982.

Radar cross section (RCS) reductions are incorporated into the total aircraft design to include the aircraft basic structure and subsystems configuration; therefore, this feature is not specifically broken out in a unique budget category.

R&D ACTIVITIES NOT COMPLETED

QUESTION: How much of the remaining B-1B R&D is for activities not completed at the time of the 1977 termination?

ANSWER: A trace of the RDT&E requirement from production/deployment termination of the original B-1A in 1977 to the present should help in understanding the composition of the current B-1B RDT&E program.

When B-1A production/deployment was terminated (June 30, 1977), RDT&E activities which remained incomplete/deferred represented 26% of the planned $4209.1 million (TY$) program: $1094.6 million (TY$); $1276.8 million (FY 81$). These totals were extracted from the B-1A Selected Acquisition Report (SAR), dated July 5, 1977. A breakout of the remaining RDT&E funding is as follows.

Fiscal Year	Then Year $ (M)	FY 81$ (M)
4/77	121.0	160.0
78	442.5	545.6
79	309.6	351.0
80	132.5	138.0
81	48.3	46.5
82	30.7	27.4
83	10.0	8.3
	1094.6	1276.8

From June 30, 1977 to April 30, 1981, a total of $709.3 million (TY $) of RDT&E funds were expended on the B-1A/Bomber Penetration Evaluation (BPE) development and flight test programs. The actual expenditures are as follows.

Fiscal Year	Then Year $ (M)	FY 81$ (M)
4/77	120.6	159.4
78	442.5	545.6
79	50.2	57.0
80	54.9	57.2
81	41.1	39.5
82	--	--
83	--	--
	709.3	858.7

However, following the decision to stop production and deployment, the scope and content of the B-1A RDT&E program were revised. In particular those activities which were designed to achieve the full qualification of the aircraft and to establish the support system were curtailed or deleted. Of the $709.3M actually expended, only $340M ($400M FY 81$) was effectively applied to those tasks which remained at termination of the production/deployment program. Therefore, of the total $1276.8 million (FY 81$) of RDT&E effort which remained, only $400 million (FY 81$) was accomplished -- leaving approximately $900 million (FY $81) of valid RDT&E requirements outstanding from the original program.

In addition, the B-1A production plan called for the production aircraft to have several improvements that would have been part of the production engineering program -- improvements which are designed to reduce the cost of producing the aircraft and the cost of owning the aircraft once you have it. Most of those were identified but were carried in production engineering and the production account in the original B-1 program -- not in the R&D account.

As a result of production stop and start up, concurrency, and propriety of funding considerations, these cost/producibility efforts are more appropriately funded under the R&D account in the B-1B program. The cost to incorporate these efforts adds another $900 million (FY 81$) for the RDT&E program.

Finally, there is an additional $700 million in the RDT&E program for the B-1B associated with incorporating features which were not in the original B-1A program such as cruise missile carriage, conventional weapons capability, RCS reduction, and upgraded electronic countermeasures.

In sum, the RDT&E activities necessary for the timely and cost-effective transition from systems development and integration into production are attributable to three primary sources:

(1) To complete RDT&E activities incomplete and/or deferred in 1977 at the time of B-1A production/deployment termination	$900M
(2) To incorporate producibility/cost redesigns which will reduce program and operating costs	$900M

(3) To incorporate new features (multi-role/enhanced capabilities) in accordance with Congressional direction	$700M
	$2,500M

TEST PLANES

QUESTION: What FY 1983 B-IB flight test activities are scheduled for the number two test plane? When does the number four test plane begin its flight testing?

ANSWER: B-IA aircraft number two is a highly instrumented aircraft which will be used for stability, control, vibration/acoustics, dynamic response, propulsion, and weapons separation tests. B-IA aircraft number four will be modified for the new offensive and defensive system groups, heavyweight (increased takeoff and in-flight gross weight) buildup, and adverse weather testing and will begin flight testing in July 1984.

MK-12A USED AS RE-RENTRY VEHICLE

QUESTION: Mr. Secretary, did the October 2, Strategic Force Modernization program which was presented to Congress presume that the MK-12A would be used as the re-entry vehicle for the MX?

ANSWER: Yes. At that time the MK 12A was the baseline reentry vehicle for M-X. The decision to proceed with the ABRV was made in January of this year following an extensive review by the Department of Defense.

THREAT POSED BY NUCLEAR MATERIAL REQUIREMENT

QUESTION: At the time of the presentation of the plan to Congress, did the MK-12A nuclear material requirement pose any threat to the nuclear materials requirement for any other of our nuclear weapons programs? Would you have presented such a program to Congress if it had?

ANSWER: All nuclear weapons programs compete for, and are directly affected by, the availability of Special Nuclear Materials (SNM). At the time the President's strategic program was presented to the Congress, the MK 12A was judged to be the only reentry vehicle that could be developed and procured in time to meet the M-X IOC of late 1986. Given the importance of M-X to our national security, there was no hesitation in proceeding with development of the MK 12A even though it required more SNM than the ABRV.

Now that the decision has been made to develop and procure the ABRV and cost and schedule issues have been put to rest, the Air Force views the SNM savings that will result as a very positive benefit.

FACTORS PRECIPITATING CHANGE

QUESTION: Can you go over the post-October events that led to the ABRV decision? What factors precipitated this change in the M-X re-entry vehicle program?

ANSWER: The decision to develop the ABRV was made following an extensive review and assessment conducted by the Office of the Secretary of Defense. Before the decision was made, the Air Force advocated remaining with the MK 12A as the baseline M-X Reentry Vehicle principally for cost and schedule reasons.

Schedule problems were eased in two ways. First, restructuring of the M-X program in response to the President's decision of October 2, 1981 caused the system IOC to shift from July 1986 until later in the year. Secondly, it was determined that an arming and fuzing system being developed by the SANDIA National Laboratory could be used, allowing us to develop and procure ABRV in time to meet the late 1986 M-X IOC.

As a result, moderate schedule risk is incurred as compared to relatively low schedule risk which would have been the case with the baseline MK 12A program. However, modification of the baseline MK 12A to include insensitive high explosive in the warhead and to add an improved arming and fuzing system would have increased schedule risk to a level comparable with that of ABRV.

Cost remained a major concern even after schedule problems were eased. The Air Force Budget did not include funding for ABRV. This situation was corrected, however, through adjustments to the President's budget submission and through inclusion of FY 1982 ABRV requirements in the Department's Supplemental Appropriations Request.

With removal of these two major concerns, the Air Force supports the ABRV and the benefits it brings to the M-X program.

SANDIA FUZE

QUESTION: Is DOD confident that the SANDIA Fuze for the ABRV represents an acceptable risk, from a scheduling point of view? Is DOD now considering a second source for the ABRV fuze?

ANSWER: We believe that the SANDIA fuze can be developed in time to meet a late 1986 M-X IOC with moderate schedule risk. General Electric will be carried as a back-up contractor for fuze development. This is considered to be a prudent approach, given the importance of M-X to America's national security.

ABRV/MK-12A ACQUISITION COST

QUESTION: How much more will the ABRV acquisition program cost that a MK-12A acquisition program for the M-X missile?

How much nuclear materials savings will that amount to? In grams? In dollars?

Can the Air Force afford to develop ABRV? Will not funding the additional cost for the ABRV tend to constrain available fiscal resources for other needed Air Force conventional and stratgic programs?

ANSWER: The cost to the Air Force for ABRV will be an additional $881 million (FY 1982 $). From a broader government-wide perspective this added cost will be offset to a large extent by savings in Special Nuclear Materials. At an equivalent yield of (deleted) the ABRV uses considerably less quantity of scarce (d) (approximately (d) kilograms less per warhead) than does the MK 12A. Across a force of some (deleted) this equates to an approximate savings of $500 million (FY 1982 $). Further, if we continued with the MK 12A program, an improved fuze would have been included at an additional cost of some $259 million (FY 1982 $). Considered together these costs tend to balance out the added cost of ABRV.

As for cost constraints, funding for FY 1983 and beyond was provided to the Air Force at the time the decision to proceed with ABRV was announced. A supplemental appropriations request for $57 million has been proposed to cover FY 1982 ABRV work. If the supplemental is not approved by Congress, then offsets for the ABRV would have to be identified thus constraining other Air Force programs.

DEVELOPMENT OF RV 300 KT WARHEADS

QUESTION: Why develop an RV with 300 KT warheads when we already have one? Is nuclear material savings the principal factor?

ANSWER: Significant savings of special nuclear materials with the ABRV at the equivalent yield to MK 12A is just one reason why the ABRV was chosen for M-X. Other reasons are:

- ABRV can be manufactured with a yield of (d). This provides a significant hedge in maintaining required hard target kill potential should M-X accuracy be less than expected.
- ABRV is an advanced technology reentry vehicle with improved accuracy, enhanced all weather capability, and improved hardness against nuclear effects.
- The ABRV will incorporate modern safety features which will reduce even further the already very remote chance of a nuclear accident. (Deleted).
- Finally, the ABRV provides an important element of diversity and advanced capability in the MIRVed ICBM force.

$24 MILLION CONTRACT FOR ABRV

QUESTION: Why has the Air Force let a $24 million contract for ABRV full scale engineering development prior to the FY 1982 supplemental?

ANSWER: The contract was let to meet the late 1986 M-X IOC with the ABRV. Delaying the initiation of development work until June of this year would have moved ABRV availability to May of 1987, producing an approximate six-month slip in the M-X IOC. Consequently, waiting for approval of the Supplemental was not judged to be a prudent course of action. Funds for the contract were drawn from the M-X line.

B-52 UPGRADE/STRATEGIC MODERNIZATION

QUESTION: General Allen, your statement notes that over $2.1 billion is budgeted for the maintenance and improvement of the B-52 fleet in 1983. How much of this expense is associated with the strategic modernization program?

ANSWER: The FY 1983 budget submittal for B-52G/H strategic modernization is $502.3 million. These funds provide research, development, test and evaluation for the offensive avionics system, cruise missile integration, and for procurement of the associated modification kits.

SEPARATION OF MODIFICATIONS TO AIRCRAFT

QUESTION: Can the modifications to these aircraft be separated in terms of those which add to the overall capability of the aircraft versus modifications required to maintain an aircraft at its existing capability?

ANSWER: The B-52 total FY 1983 modification program is $554.6 million; $488.4 million are classified as new capabilities and $66.2 million to maintain the aircraft at its existing capability. Of the $305.3 million requested for the Offensive Avionics System in the new capability category, approximately 85% of the total cost ($259.3 million) is required for improve reliability and maintainability.

B-52D RETIREMENTS BEFORE AMORTIZING PREVIOUS INVESTMENT

QUESTION: The Air Force concluded an expensive reskin and rewing program on the B-52Ds just four years ago. Why are we retiring these aircraft before we have fully amortized this previous investment?

ANSWER: The requirement to reskin and rewing the B-52D fleet was identified while the aircraft was heavily committed to the Vietnam War. The purpose of the modification was to beef up an aircraft wing structure that had been sorely stressed during the latter stages of the war. Not modifying the aircraft would have necessitated grounding the entire fleet at a time when initial testing of the B-1 prototype had not even begun.

Our current commitment to rapidly modernize our strategic forces within fiscal constraints led to our decision to retire three squadrons of B-52Ds, the oldest, least capable, and most costly to maintain B-52s. Maintaining these three squadrons that have not been modified with the new B-52D bomb-nav system through FY 86 would cost an additional $1.2B. The funding would be invested in an aging fleet with limited weapons carriage, outmoded avionics, limited target selection, and a continually decreasing capability to penetrate known defenses. In addition, these squadrons would require about 84 tankers for SIOP execution that would be more effectively used to support B-52s carrying ALCM. It is our judgment that we can best counter the increasing Soviet threat by investing in urgently needed modernization of our strategic forces.

IMPROVEMENTS TO OUR NORTH AMERICAN AIR DEFENSE

QUESTION: Secretary Orr, your statement asserts that our current atmospheric defense system has serious deficiencies which may preclude adequate warning to the National Command Authorities. What improvements do you recommend?

ANSWER: Current system deficiencies and recommended improvements are detailed in the DOD North American Air Defense Master Plan. Significant recommendations include improving our tactical warning capability with an upgraded DEW line for coverage of northern approaches and deployment of OTH-B radars to survey the southern and coastal regions of the NORAD defended area. Additionally, procurement of additional AWACs will assure survivable surveillance and C^3 in crisis or combat. Air Defense fighter modernization is also included in the Air Force's expanded buy of F-15s. Current planning calls for completion of the phased replacement of all Active F-106s in FY 86. Fighter modernization will provide NORAD fighter units with the range, fire-power, radar search volume and look down/shoot down capability to counter the current and projected threat.

CADIN-PINETREE RADAR LINE

QUESTION: The atmospheric defense of the continent is a cooperative U.S.-Canadian effort, the major segment of which is the so-called "Cadin-Pinetree" radar line. Do you believe that the Canadians are shouldering an appropriate share of the operational costs of these radar units?

ANSWER: Sharing defense responsibility with Canada is a much broader issue than the allocated costs for operating the 24 radars in the CADIN-Pinetree line. The US needs to overfly Canada with strategic and tactical forces (offensive and defensive), and engage enemy forces in crisis or war under the NORAD mutual defense support arrangement. The CADIN-Pinetree line has supported our air defense needs well for some time and we believe the negotiated cost-sharing arrangement is appropriate for the present. However, we anticipate opening discussions with Canada in the near future to discuss our air defense needs in the context of the DOD Air Defense Master Plan. Cost sharing arrangements will be a major focus during the deliberations.

TOTAL AIR FORCE BUDGET FOR SPACE SHUTTLE

QUESTION: Mr. Secretary, the Space Shuttle program is funded out of a number of separate Air Force budget lines -- Space Shuttle, Space Boosters, Space Launch Support and Space Test Program. What is the total Air Force budget for Space Shuttle programs in FY 1983? Why can't we consolidate these programs into one separate space shuttle line item, where they would be more easily distinguishable?

ANSWER: The structure of the various programs for Shuttle-related activities reflects a balance among the various internal Air Force, DOD and Congressional requests for separation of tasks and funding.

The funding for the Air Force developmental responsibilities within the national Space Transportation System (e.g. Vandenberg, Inertial Upper Stage (IUS)) is identified separately in the DOD STS Acquisition Program.

The Air Force requested and received permission to consolidate the operational funding for Air Force Shuttle activities into one program, Space Launch Support. This consolidation includes both the Operation and Maintenance responsibilities we discharge for the national program (e.g. operation of Vandenberg for all users) and the various payments for Shuttle use (e.g. Orbiter Flight Charges to NASA and IUS hardware).

Payload development and procurement remains separately identified to distinguish the purpose of the launch (payload) from the means (the Shuttle). Therefore, programs such as Space Test Program remain separately identified as "payload" programs.

The development of the Titan variant of the IUS and the hardware procurement for use on the Titan launch vehicle are carried separately from the Shuttle program and follow Expendable Launch Vehicle rules. Specifically, Space Boosters funds the delta development (over and above the Shuttle IUS development) and the using payload funds the IUS hardware.

The Consolidated Space Operations Center is funded as a separate program because it is neither a shuttle control element nor a satellite control element but a "consolidation" of both.

The total Air Force Budget for the Space Shuttle is, therefore, limited to the DOD STS Acquisition program and the Space Launch Support program.

	FY 83
DOD STS Acquisition	580.5M
Space Launch Support (including military personnel)	349.0M
	929.5M

UPPER STAGE SHUTTLE BUDGET LEVELS

QUESTION: What level of funding is programmed in FY 1982 and budgeted for FY 1983 for Air Force development of a higher energy upper stage for the shuttle?

ANSWER: The Air Force has, in progress, a reprogramming request to provide $4M in FY 82 to fund the initial portion of the requirements definition/concept definition work. Additional funds will be required in FY 83; none are currently requested; a reprogramming will be submitted to identify the funding required.

DEVELOPMENT OF UPPER STAGE VS CENTAUR

QUESTION: Is the Air Force in effect developing an upper stage separate and distinct from the Centaur stage that NASA now has under development? Why?

ANSWER: The Air Force and NASA will jointly conduct a competitive definition phase for the Higher Energy Upper Stage (HEUS). A Shuttle-compatible variant of the existing Centaur (which is compatible only with expendable launch vehicles) is a competitor for the HEUS development.

SHOULD AF PURSUE ITS OWN UPPER STAGE PROGRAM

QUESTION: Why should the Air Force pursue its own program for a high energy upper stage that, so far as we can determine, will have the same performance as NASA's Centaur?

ANSWER: DoD has not rejected the Centaur. The Higher Energy Upper Stage (HEUS) is a 10,000 lb class upper stage to be available in FY 87. Centaur is a competitor for the HEUS, and we intend for the HEUS to be a competitive procurement.

DoD rejected a specific Centaur proposal that required acceptance of inordinately high levels of risk to its near-term launch requirements to assure the availability of the Centaur for a NASA planetary mission. Specifically, the DoD declined to participate in a schedule constrained development program leading to a Centaur available for the NASA Galileo launch in Oct 85.

COST OF THE FY 1983 END-STRENGTH BUILD-UP

QUESTION: The FY 1983 budget request envisions a 19,200 end-strength build-up. What is the overall cost of this increase, and specifically why are these people needed?

ANSWER: The cost of the 19,200 end strength increase is $196M. The programs which these manpower increases support have been given an intensive review by the Air Force, OSD, and OMB prior to their inclusion in the FY 1983 President's Budget. These increases represent considered evaluation of policy changes, workload changes, taskings in support of contingency plans, and other pertinent factors. The majority of the increases listed below are directly related to the readiness and sustainability of the Air Force; the remainder are essential to support those thus directly related:

MAJOR DRIVERS
FOR
AIR FORCE END STRENGTH CHANGES
IN
FY 1983 PRESIDENT'S BUDGET

Tactical Fighter/Training/Support	+3,887
New Weapon Systems (GLCM, ALCM, TR-1, etc.)	+3,674
Tanker Wartime Readiness	+2,079
Wartime Readiness Initiatives	+1,858
Training/Personnel Programs	+5,138
Other Tactical Force Programs	+1,424
Physical Security of Nuclear Weapons/Aircraft	+843
Airlift Programs	+722
Rapid Runway Repair	+555
Increased Medical Support for Increased End Strength	+537
Weapon Procurement/Acquisition/Test/Evaluation/Support	+497
Other Strategic Program	+402
Communications/Intelligence	+666
Foreign Military Sales	+236
Defense Agency Support	+134
NATO AEW&C	+107
Consolidated Space Operations Center	+72
Force Structure Phasedowns	2,637
Joint Surveillance System (JSS)	-539
Potential Contracting Out	-517
Net All Other	+62
NET CHANGE	+19,200

END-STRENGTH BUILD-UP EXACERBATES CURRENT PERSONNEL SHORTAGES

QUESTION: The Air Force is still undermanned in pilots, navigators, engineers, some physician specialties and skilled non-commissioned officers. Won't these 19,200 force growth exacerbate the current personnel shortages?

ANSWER: The Air Force does not expect the 19,200 build to exacerbate current personnel shortages. To the contrary, we are encouraged by the positive retention occurring as a result of Congressionally enacted compensation initiatives. We see the improved retention, as well as an increase in accession, as a means to help meet the force growth and also ease specially shortages, particularly in the rated area.

Our current projections show the pilot and navigator inventories increasing by eight and five percent respectively. We are also optimistic that recruiting and sustaining initiatives will narrow the current deficit of officers in the engineering and physician specialties. We expect to attract and retain engineers through AFROTC scholarship awards, College Senior Engineering Program, the Airman Education and Commissioning Program, and the recently authorized career continution pay. Physician speciality manning should be eased by an increase in the number of students completing Graduate Medical Education.

During FY 83, we will continue initiatives begun in FY 81 to solve our enlisted chronic critical shortage (CCS) skill problems. These initiatives include increased promotion opportunity for personnel in CCS skills, extending selected noncommissioned officers two years past normal mandatory retirement points, increasing prior service recruiting efforts targeted at CCS skills, increased Selective Reenlistment Bonus funding, and returning individuals with previous experience in CCS skills to CCS duty. We originally projected a shortage of 11,000 NCOs in grade E5 thru E7 in the CCS skills at the end of FY 82. By the end of FY 83, notwithstanding increased authorizations in many CCS skills, we expect to have eliminated one-third to one-half of the projected deficit.

8% PAY RAISE FOR MILITARY

QUESTION: Why should the military receive an 8% pay raise this year when federal civilians are capped at 5%?

ANSWER: Any attempt to freeze military pay or cap it below private sector wage growth (as measured by the PATC worker's survey -- the index on which federal civilian and military pay raises are based under current law) is reminiscent of the approach used in the 1970s when the economy was rebounding from the 1974 recession: a pay cap was imposed in 1975, followed in rapid succession by two years of pay raise reallocations (1976 and 1977) and two subsequent pay caps (1978 and 1979). At the time, the OSD/OMB planners believed they would be able to forestall losses of experienced specialists/technicians by resorting to expanded use of bonuses. It proved to be a costly fiscal misjudgement which created a near disaster for military preparedness and readiness. As a result, in 1979, all Services failed to meet their recruiting goals for the first time in the history of AVF. More importantly, all Services experienced dramatic and alarming losses of experience careerists including pilots, navigators and enlisted personnel in critical skills.

To reverse losses caused by repeated pay caps, Congress passed two substantial "out of system" pay raises (1980 and 1981) to restore military pay to the relative levels of comparability with the private sector that existed in 1972. Notwithstanding the favorable effects of an upward surge of retention and increased recruiting success, the Services are still unable to offset the experience which was lost. For example, the Air Force is short 1100 pilots, 1000 engineers, and about 11,000 noncommissioned officer specialists in critical sortie-generating skills. We do not project "getting well" until the 1985/1986 time frame, even under the best of circumstances.

Imposition of a pay cap or freeze would reverse the beneficial effects of the 1980 and 1981 compensation improvements. It would initially impede and ultimately frustrate the Services' attempts to recover from the experience losses of the 1970's. In addition, experienced/highly qualified servicemembers could be expected to leave the service in greater numbers when the economy improves and increased demand occurs for those with highly transferable skills in the private sector.

INCREASED MEMBER AND DEPENDENT MILEAGE ALLOWANCE

QUESTION: This budget request contains $19.1 million for increased member and dependent mileage allowance. Twice Congress has refused increased mileage; however, since DOD has not shown auto operating costs exceed the current 13 cents allowance. Why the third request?

ANSWER: Our third request is predicated on more precise information and is consistent with the guidance from the House Appropriations Committee to OSD in conjunction with the FY 82 Defense Appropriations Bill. To elaborate, in the absence of an agreed methodology for computing the member's PCS mileage allowance, the House Report on the FY 82 Defense Appropriations Bill directed DOD to establish a formula for computing the "per mile" cost of operating an automobile. The House guidance authorized full reimbursement of all gas, oil, maintenance, and tires; an equitable portion for license and taxes; and reimbursement for depreciation not to exceed 50% of the first year's depreciation on a new car. Using the House guidance and Runzheimer (nationally recognized travel consultant) data, a DOD study group documented that 16.17 cents per mile was needed to operate a new car:

Cost Element	Cost Per Mile
gas, oil, maintenance, tires	10.97 cents
depreciation (50% of 1st year)	4.70
license, taxes (50% of annual)	.50
Total Cost	16.17 cents

This documentation was used by OSD to develop its proposal to increase the PCS mileage allowance to 16 cents in FY 83.

Even using the House formula and estimating 50% rather than full assessment for license and taxes, the "per mile" cost of operating a new intermediate sized automobile exceeds the 16 cents per mile requested by DOD. However, indications are that the House formula understates the true costs since members generally drive older automobiles and incur greater fuel and maintenance costs than reflected by new car statistics. In addition, other agencies such as Runzheimer and Department of Transportation give full credit for depreciation and include the cost of insurance in their estimates.

The lack of adequate reimbursement for government-directed permanent change of station (PCS) moves is one of the most critical issues facing the Air Force today. It is estimated that Air Force members incur over $280 million in unreimbursed out of pocket expenses each year to subsidize government-directed moves. The impact of this "negative compensation" is being felt in retention and in the willingness of members to make a PCS move. Recent surveys showed that nearly 1 in 4 retirement eligibles would retire in lieu of any move and volunteers for overseas duty have declined from 70% in 1975 to 26% in 1981. To illustrate the full extent to which military members are under-reimbursed when complying with Government orders, a GS-9 making a 2,800 mile move may receive up to $13,293 in reimbursements while an equivalent military member (E-7) receives only $1,592.

Dependent mileage allowances of 7 cents per mile (equivalent to $21 per day based on standard of 300 miles per day) for dependents 12 years of age and older and 3.5 cents ($10.50 per 300 miles per day) for dependents 2 through 11 years of age is another area related to Government-directed travel in which members are not adequately reimbursed. Using data from Runzheimer survey of October 1981 room and meal rates, it is estimated that dependents 12 years of age and older would incur over $38 per day in food, incremental lodging, and incidental expenses while dependents 2 through 11 years of age would incur expenses of $30 per day. Implementation of the 10 cents and 7 cents per mile allowances in FY 83 would still fall short of adequate reimbursement for dependent PCS expenses. Favorable consideration of the increased mileage allowances is clearly warranted to help ameliorate the serious financial penalty now associated with military PCS moves.

PER DIEM EQUITY

QUESTION: The Air Force is requesting $9.1 million in a supplemental this year and $11.5 million for FY 1983 to fund per diem equity. This would provide per diem for enlisted personnel on travel as well as basic subsistence payments, the same as officers now receive. But under your proposal enlisted would actually be paid more than officers. Where's the equity?

Since per diem equity involves what amounts to a double payment, why not solve the problem of eliminating the per diem for officers? That would establish equity and save money in the process.

ANSWER: Under P.L.s 96-513 and 97-60 enlisted members would not be paid more than officers for necessary and actual expenses incurred when traveling on official business. Although Basic Allowance for Subsistence (BAS) is different for officers and enlisted members, this difference is not relevant to the per diem equity issue.

BAS and per diem serve different purposes; the purpose of BAS is not to provide reimbursement for expenses of official travel. BAS is one element of the servicemembers' normal pay or Basic Military Compensation (BMC) which in addition to BAS includes Basic Pay, Basic Allowance for Quarters, and the tax advantage which accrues because allowances are not subject to Federal income tax. When combined with the other elements of BMC, it provides our members levels of pay that are reasonably comparable to salaries in the private sector for equivalent levels of work. If the amount received by the individual is reduced because of unreimbursed mission-related travel expenses, as is now the case for enlisted members, the value of the members BMC is diminished accordingly.

Per diem, on the other hand, is for the reimbursement of necessary and actual expenses incurred during official travel. Since official travel is an integral part of the mission, its cost should be borne by the Government and not subsidized from the pay of servicemembers. Therefore, equity can only be achieved if both officers and enlisted members receive equal amounts to offset food, lodging and incidental expenses incurred while in travel status.

OVERBUDGETING PERSONNEL TO FINANCE OTHER PROGRAMS

QUESTION: Almost $90 million was made available for reprogramming out of the FY 1981 personnel account. Are we overbudgeting personnel so that the other programs can be financed?

ANSWER: The Air Force does not intentionally overbudget the Military Personnel account to finance other programs.

There were several fact-of-life reasons why the Air Force requested a transfer of funds from its FY 1981 Military Personnel account. Strengthening of the dollar overseas reduced overseas station allowance requirements. Program execution indicated the Air Force did not require all of the approved financing in the Variable Housing Allowance category because the cost of this new entitlement was estimated without the benefit of any previous experience. Fewer manyears, added to the program in the Reagan supplemental, were required than estimated and resulted in savings in the Enlisted and Subsistence accounts. Savings were also generated in the PCS account because overseas requirements were filled with more junior individuals at a less expensive rate. The Air Force does not consider these changes as overbudgeting.

As a result of the FY 1981 transfers, the Air Force identified $74.0 million as surplus in FY 1982. The FY 1982 budget estimate was reduced by $116 million in October 1981 for these fact-of-life changes and for a 6,000 end strength reduction prior to Congressional action on the FY 1982 appropriations bill. These fact-of-life changes were also considered in the preparation of the FY 1983 President's Budget.

EXPANSION OF THE AF RDT&E BUDGET

QUESTION: Mr. Secretary, the Air Force R&D budget request for FY 1983 is $2.4 billion above the FY 1982 appropriation level. Over $1.4 billion of this increase is for strategic programs. We know that most of this is for the MX and B-1B programs. Why does the rest of the Air Force R&D budget expand so dramatically this year?

ANSWER: In addition to the MX and the B-1B programs, the RDT&E budget increases in the following areas: In the tactical area, the F-15 R&D increases $93 million to incorporate new capabilities and to retrofit system improvements to aircraft already in the field. The F-16 R&D increases $29 million to continue radar improvements, AMRAAM integration, and to start testing of the improved radar. Next Generation Trainer R&D increases $38 million to continue airframe and engine testing, and to start building test aircraft. These represent the major weapon system development increases associated with current or near term force expansion other than the B-1 and M-X.

In other areas of R&D, there is an increase of $86 million for the technology base. Of this increase, $30 million is for defense research sciences and $36 million is for inflation in the remainder of the technology base. Advanced technology development increases by $99 million. Increases for the Space Laser Program of $40 million and advanced radiation technology of $20 million account for most of this increase.

Classified programs account for nearly all the increased R&D expenditure in intelligence and communication.

In the area of defense wide mission support, five space related programs account for most of the $202 million increase.

PRINCIPLE PROGRAMS INCREASING TACTICAL PROGRAMS

QUESTION: The Air Force tactical program budget has increased by $450 million over last year. What are the principle programs driving this budget upward?

ANSWER: Principle RDT&E program increases are in the F-15 ($93 million), F-16 ($29 million), AMRAAM ($70 million), Conventional Standoff Weapon ($39 million), Alternate Fighter Engine ($59 million), AWACS ($26 million), Next Generation Trainer ($38 million), and Advanced Tactical Fighter ($27 million).

INCREASE FOR DEFENSE RESEARCH SCIENCES

QUESTION: The Defense Research Sciences budget has been increased from $136 million to $165.8 million. What is this large, $29 million increase for this program to be used for?

ANSWER: The increase will be used to revitalize the research infrastructure that enables the Air Force to maintain its qualitative technological edge. It involves the following efforts:

- As a result of an Interagency Working Group on University Research Instrumentation, which included OMB and White House participation, OSD directed that $10 million per year be added to the Services' research budgets beginning in FY 1983 for the specific purpose of modernizing university research equipment.
- The FY 1983 program includes $8 million for Space Propulsion and Power, Spacecraft Structures and Materials, and Spacecraft Image Processing; research essential to the Air Force's future role in space. An additional $1 million is planned to improve the survivability of satellites through greater resistance to laser radiation and improved covertness.
- The momentum of FY 1982 initiatives in Aerodyanamics of Fuel Efficient Aircraft and Low Speed Take Off and Landing, Weapon System Automation, Manufacturing Sciences, and Chemical Agent Defense will be sustained during FY 1983 at a $7 million level of investment.
- The remaining increase will be invested in continuing research efforts in support of the development of directed energy weapons, in particular investigations in space unique problems, and in promising research areas in machine intelligence and information and image processing.

NEED FOR AF ADVANCED TECHNOLOGY DEVELOPMENT PROGRAMS

QUESTION: Air Force Advanced Technology Development programs have also received a major increase, from $372 million to $472 million. What programs are receiving the major increases here? Why are they needed?

ANSWER: The programs receiving the major increases are Space Laser Program $40.6 million, Advanced Radiation Technology $19.6 million, Advanced Simulator Technology $8.6 million, Advanced System Integration Demonstrations $9.6 million.

The Space Laser Program, a new program element, is designed to determine feasibility of space based weapon systems. This effort is being funded in the Space Defense Systems line for FY 1982.

The increase in the Advanced Radiation Technology line is for the completion of optical subsystem upgrades and start of laser system integration for the Mid-Range Applied Technology effort.

The increase in the Advanced Simulator Technology program will enable the contractor to procure all the required hardware items and expedite completion of the design engineering fabrication and test of the first plant prototype of the computer image generator.

The increase for the Advance System Integration Demonstrations program will enable the Integrated Communications, Navigation, Identification Avionics (ICNIA) project to proceed with dual award contracts for the design, fabrication and integration of the ICNIA subsystem.

Also, the Advanced Systems Avionics project will establish the foundation for integrated, durable, reliable avionics systems for the next generation of aircraft and will demonstrate the resulting concepts in an advanced and highly realistic simulation environment.

LARGE SUMS BUDGETED FOR SPARE PARTS

QUESTION: Over the last two years, substantial sums have been provided for spare parts. By FY 1983 the effects of this funding should be obvious. Do you expect a substantial improvement in aircraft mission capable rates?

ANSWER: We expect some increase in mission capable rates in FY 1983. However, because of long production lead times for many spares, the full impact will not be realized until FY 1984 or later.

SAVINGS FROM INFUSION OF SPARE PARTS

QUESTION: What savings are evidenced or factored into this budget due to improved aircraft performance from this infusion of spare parts? At a minimum, the unscheduled maintenance problems should diminish.

ANSWER: The infusion of spare parts will result in improved readiness and sustained combat capability, not quantifiable savings. While spares funding increased in FY 81, we still had significant unfunded peacetime and wartime requirements which had to be carried over to FY 82. Increased FY 82 funding of peacetime requirements and War Readiness Spares Kits (WRSK) and Base Level Self-Sufficiency (BLSS) requirements, along with the improved Other War Reserve Materiel (OWRM) requirements funding, will not improve aircraft capability or result in diminished maintenance until FY 84 when the Air Force begins receiving the parts. The leadtime for aircraft replenishment spare parts averages 24 months; therefore, increased aircraft readiness and sustainability will not begin to be achieved until FY 84.

WHY THE TANKER PROGRAM INCREASES?

QUESTION: The Strategic Forces flying hour program drops some 25,000 hours as a result of the Air Force decision to retire three B-52D squadrons. Ironically, the flying hours increase for KC-135 aircraft. With fewer aircraft and hours to support, why is it that the tanker program increases?

ANSWER: The KC-135 flying hour requirements are developed based on KC-135 crew training requirements and the need to support the air refueling training for all DOD users including SAC, MAC, and the Tactical Air Forces in particular. The FY 83 program will only support 64% of these users' air refueling requirements.

The B-52D force will be reduced by 44 aircraft in FY 83 which will reduce the KC-135 flying hour requirement. However, the net increase in aircraft inventory for FY 83 will be 79 and the percentage of aircraft within the overall Air Force inventory requiring air refueling support will also increase. These factors taken together will produce a growth in the need for air refueling support.

LONG TERM OBJECTIVE FOR PILOT FLYING TIME

QUESTION: The budget assumes an average 17 hours per month of flying time for each pilot. This is up from the FY '82 rate of approximately 16 1/2 hours. What is the long term Air Force objective for pilot flying time and how is the objective determined?

ANSWER: The Air Force budget makes no specific assumptions regarding average pilot flying time. The long-term Air Force flying hour objective is a program that enables our crews to train to meet full unit peacetime tasking which will adequately prepare them for war. Since each of our major weapon systems has different peacetime requirements and war-fighting capabilities, we have different requirements for each weapon system.

We program each system according to the specific requirements, not only of the system, but also on the basis of the unit mission. For instance, the objective for fighter units is determined by assessing the appropriate mix of sorties necessary for units to meet full employment tasking. We train airlift crews to provide strategic and tactical combat airlift to support contingency and wartime operations in pursuit of national objectives. Our strategic flying hour programs are structured to satisfy aircrew training requirements. Additionally, the KC-135 program includes hours to support receiver aircraft air refueling training.

NO BACKLOG OF OVERHAUL AND REPAIR

QUESTION: For the first time in roughly 10 years the Air Force is projecting that there will be no backlog of overhaul and repair beyond? Roughly $360 million or 10% increase will be required to meet this objective. Will the existing industrial capacity be able to handle this program growth?

ANSWER: We believe that adequate industrial capacity is available to handle this program growth because most it is a continuation of on-going programs at organic and/or contractor facilities. For example, the E4A to B mod ($+44.5 million), C-5 wing mod ($+40.4 million), EF-111A mod ($+11.4 million) and B-52 Offensive Avionics System/Cruise Missile Integration mod ($+9.1 million) are program increases based on preplanned and scheduled inputs of aircraft to facilities for modification installation. This same logic holds true for our major increases in engines and exchangeable component repair.

INSTALLATION OF OAS ON B-52G & H

QUESTION: Does the Air Force modernization plan include the installation of the Offensive Avionics System on all of the B-52G and H aircraft?

ANSWER: Yes.

B-52G EXCLUSION FROM COMMON LAUNCHER PROGRAM

QUESTION: There has been some discussion of the development of a common launcher system for the cruise missiles on B-52 and B-1 aircraft. As the B-52G aircraft are just completing the cruise missile integration modification, will these aircraft be excluded from the common launcher program?

ANSWER: The B-52H aircraft will use the Common Strategic Rotary Launcher (CSRL) for internal cruise missile carriage. The B-52G is currently being modified for external carriage only. However, we are presently evaluating use of the CSRL on the B-52G for internal carriage.

WING MODS ON B-52H AIRCRAFT

QUESTION: An estimated $86 million will be spent over the next few years to install a wing modification on the B-52H aircraft which carry cruise missiles. This modification had been required to comply with the verification provisions of SALT II. In view of the expiration of the treaty why is the Air Force continuing this program?

ANSWER: The requirement for wing modifications on B-52H cruise missile aircraft has been rescinded. Therefore, the Air Force will not expend funds to make those modifications.

JT3D AS INTERIM SOLUTION FOR TANKERS

QUESTION: Funding was provided in the FY 1982 appropriation to procure and install JT3D engines for the KC-135 tanker reengining program. As the CFM-56 engine will not be available until mid-1984, is it possible to develop the JT3D as an interim solution for the tankers now in overhaul?

ANSWER: The FY 1982 funds appropriated for JT3D reengining will be used to procure 28 donor 707 aircraft and install the refurbished components on Air National Guard (ANG) KC-135s. All tankers to receive the JT3D engines will be assigned to the Air National Guard for compatibility. It is desirable that tankers be reskinned before receiving JT3D engines because of additional costs for pylon attach fittings. However, the schedules for ANG tanker reskin, programmed depot maintenance, and JT3D reengining are not compatible. To the extent that an ANG tanker is reskinned during the period of the reengining, both jobs will be done concurrently. For the most part, JT3D engines will be installed on some of the 60 ANG tankers already reskinned, including those coming out of PDM.

FUNDING FOR "PACER GRADE"

QUESTION: The Air Force proposes that funding be provided for an engine overhaul and upgrade program called "Pacer Grade." This program is designed for the J-57 engine currently aboard the KC-135 tankers. What is the relative cost of "Pacer Grade" per year, per engine versus the one-time expense of procurement and installation of the JT3D engine?

ANSWER: Pacer Grade is a one-time rehabilitation of the J57-59 engine performed in conjunction with an accelerated depot overhaul schedule. The cost of Pacer Grade is $.51M per engine or $2.04M per aircraft. The one-time expense of procurement and installation of the JT3D engine is $4.47M per aircraft for the first 18 aircraft and $4.43M per aircraft for the next 28 aircraft.

DECLINE IN CIVILIAN PERSONNEL LEVEL

QUESTION: The Air Force civilian manpower target for FY 1983 is 4,357 below that for FY 1982 and 2,819 below FY 1981. The Air Force is the only DoD component reducing civilian manpower in FY 1983. Why is this? Does this reflect a greater emphasis on contracting out of base operations?

ANSWER: The Air Force budget submitted to OSD fully funded manpower requirements in depot maintenance (DMIF) in accordance with fiscal and policy guidance contained in the OSD Defense Guidance. The guidance placed a high priority in this area because of the direct impact on readiness and sustainability. Accordingly, the Air Force funded the DMIF requirements over other valid manpower requirements.

The other Services/DOD agencies apparently afforded a lower priority to this area and submitted their budget with manpower shortfalls in this readiness and sustainability area. Of the 15,000 civilian shortfall in DOD, OSD was only successful in obtaining a civilian increase of 11,000 from OMB. This ceiling increase was allocated to the Army, Navy, and DOD agencies, thereby creating a 4,000 civilian shortfall. The residual shortfall of 4,000 was then prorated across the Services. The Air Force share was a 1,400 arbitrary reduction. In addition, the Air Force has to reduce 3,000 civilian spaces in anticipation of functions converting to contract.

Due to the large backlog of functions currently scheduled for cost comparison studies and possible contracting (5,300) it is unlikely that an additional 3,000 spaces can be studied in FY 83. Consequently, the Air Force has programmed its FY 83 civilian end strength 4,400 spaces (1,400 + 3,000) below FY 82, despite the vast expansion in Air Force mission in FY 83.

The Air Force has not yet identified specific activities to comprise its FY 83 contracting out program. It should be noted, however, that we have already contracted most of our base operating support not required for our wartime mission. Given the OSD guidance to continue a high level of contracting out over the next six years, we are reaching the point where we will be forced to consider areas which could have an impact on our wartime capability or take arbitrary reductions to accommodate reduced end strengths.

The Air Force is hopeful that it will receive its fair share of any ceiling headroom provided to DOD. Without it, a pattern of declining or static civilian end strength will seriously degrade sustainability, readiness and modernization, particularly in civilian intensive areas such as depot maintenance and reserve forces.

MINOR CONSTRUCTION LIMITATION IN O&M ACCOUNTS

QUESTION: There has been some discussion of requests to raise the limitation on minor construction financed in the O&M account from $100,000 to $250,000. What are the advantages and disadvantages of this proposal?

ANSWER: Air Force supports raising the limitation on minor construction projects financed by the O&M appropriation. The current limit of $100,000 was established in 1978 and must be changed to keep pace with inflation. A $100,000 facility in 1978 will cost $160,000 to $200,000 in FY 1983. Another important benefit of raising the limit is that it would give field commanders the ability to respond more rapidly to mission or facility use changes.

INCREASE IN BASE OPERATIONS SUPPORT

QUESTION: The request for base operations support is over $330 million or roughly 15% higher than the FY 1982 program. What contributes to this increase?

ANSWER: We can only identify a $149 million increase in base operations support. This increase includes $102 million in price growth with the remainder being program growth. The program growth includes increases for a new site activation in the GEODSS support system, beddown of the TR-1 and other mission changes at RAF Alconbury, miscellaneous contractual services for the development of a "German Model" wartime host-nation support (HNS) concept, unaccompanied personnel dormitory support to include both furniture and facility, emergency leave travel/environmental morale leave provided in the Uniformed Services Pay Act of 1981, family support centers, and contract conversions.

BUDGET DECREASES BECAUSE OF IMPROVED RETENTION

QUESTION: It has been stated that overall retention and recruitment have increased because of Congressionally enacted compensation initiatives. What portion of the FY 1983 budget reflects decreases because of improved retention? Where are the savings?

ANSWER: The FY 83 Budget was formulated in anticipation of improved retention over previous years and reflects fewer losses and gains. There was a cost avoidance of $148 million in various appropriations resulting from not having to recruit, train, and pay a higher number of accessions. Although there are no further economies or savings associated with improved retention, the Air Force is better able to accommodate a 19,200 increase in the FY 83 military end strength primarily by retaining experienced people.

REDUCTION IN SELECTIVE REENLISTMENT BONUSES (SRBs)

QUESTION: Since FY 1979, the total number of personnel receiving selective reenlistment bonuses has tripled. The 1983 budget calls for 11% of the enlisted force to receive SRBs. If recruitment and retention are up, why can't we cut back on the number and level of bonus payments?

ANSWER: Although overall Air Force retention has improved in Fiscal Year 1982, there are still many shortages of noncommissioned officers in certain skills due to past years of poor retention and recent authorization increases. The Air Force is short E-5s through E-7s in chronic critical shortage skills, all of which are authorized an SRB in at least one of three eligibility zones. We apply bonuses to these and other SRB skills to retain more of the people eligible to reenlist, to encourage those in overage skills to retrain into SRB skills, and to offer some competition with civilian industry for our highly-trained airmen. The SRB has proved its effectiveness, but we need continued good retention to fill our shortages.

REAL COST OF THE SRBs

QUESTION: Because the SRB is now paid in installments, the budget justification reflects only this year's cost rather than the long term net cost. The Air Force budget estimate for SRBs totals almost $119 million. What is the real cost, however, of these bonuses?

ANSWER: Of the $119 million, $19 million is for payment of obligated installments from Fiscal year (FY) 1982 reenlistments. For FY 1983 we have budgeted $100 million for the 50 percent lump sum payment and obligated ourselves for up to $100 million in future installments to be paid in years beyond FY 1983.

INCREASE IN BONUSES

QUESTION: Bonus use is justified by saying that bonuses selectively target and compensate areas of critical need. Yet, since FY 1979, only 95 bonuses have been reduced or eliminated, while 331 have been added or increased. For every one bonus reduction, three are increased. Why?

ANSWER: The Selective Reenlistment Bonus (SRB) is used to retain airmen in relatively undesirable skills; offer some competition with civilian industry in retaining airmen with highly marketable skills; and encourage retraining into, reenlistment in, and return of qualified noncommissioned officers to critical shortage skills. Despite improved retention we have E5 through E7 critical skill shortages which were a result of several years of poor retention and recent authorization increases to meet critical mission needs. We need the SRB to attack these shortages.

INCREASE IN PAY AND ALLOWANCES OF CADETS

QUESTION: The FY 1983 budget request for pay and allowances of cadets rises nearly $3 million, yet the actual number of cadets remains static. Why the increase in dollars?

ANSWER: The FY 1982 column of the Summary of Requirements by Budget Program excludes the October 1981 pay raise in accordance with OMB guidance. When the pay raise ($2.3 million) is added to the FY 1982 program, the difference between FY 1982 and FY 1983 is only $600,000 rather than $3.0 million.

This increase results from the pay raise and changes in the commuted ration allowance and social security rate. An increase of 29 manyears is also programmed in FY 1983.

EXPLAIN INCREASE IN FOREIGN DUTY PAY

QUESTION: Please explain the $305,000 increase in foreign duty pay for enlisted personnel.

ANSWER: The increase is due to increased manyears. The number of personnel programmed to be stationed at eligible locations overseas, where foreign duty pay is paid, increased by 1,756 manyears.

NEW SKILLS FOR ENLISTMENT BONUSES

QUESTION: The funding request for enlistment bonuses increases $603,000 for FY 1983. Why the increase, the specifically what new skills are included this year?

ANSWER: The FY 1983 Enlistment Bonus (EB) is higher due to several factors. Since the Air Force's EB Program is fairly new (implemented Mar 80) and there is a long lead time between enlistment and eventual receipt of the bonus after successful completion of technical school, we have limited experience as to the number of "takers" or the average bonus cost. The increase in the FY 1983 budget reflects our better estimate of the average bonus cost; residual payments from FY 1982 enlistees who finish high school in 1983; and an expected higher participation rate for FY 1983. At this time we do not plan to increase the number of EB skills;

however, the payment levels may be increased for two skills, Crypto Linguist and Explosive Ordnance Disposal.

INCREASE IN THE VARIABLE HOUSING ALLOWANCES

QUESTION: Provide more details as to why the Variable Housing Allowance for FY 1983 is estimated at $210 million, $8 million more than last year.

ANSWER: The increase in Variable Housing Allowance (VHA) is due entirely to increased manyears. VHA manyears are directly related to the manyears for Basic Allowance for Quarters (BAQ) with dependents and without dependents-full rate. This relationship exists because a member cannot receive a VHA without receiving either of the two types of BAQ above. Despite a slight increase in the number of government family housing units (which would reduce the number of BAQ with dependent manyears), the BAQ manyears increase substantially in FY 1983 as a result of the 19,200 end strength build.

BUDGET FOR CAREER BAS

QUESTION: Since Career BAS was disapproved by Congress last year, why has the Air Force budgeted $11.9 million for it this year?

ANSWER: Denial of the basic allowance for subsistence (BAS) persists as the most significant career irritant negatively influencing the career decisions of mid-level enlisted managers who are denied the freedom to choose where, when, and what they eat. The implicit requirement to eat twenty-one meals each week in the same place is unrealistic for today's noncommissioned officers (NCOs). They are adults who resent paternalism and what they perceive to be the stigma of being issued a meal card in exchange for food in a chow line.

NCOs/supervisors in pay grades E5 and above consider it degrading to be required to use a government mess while their married junior enlisted counterparts may eat where they choose. Experience with payment of BAS to all members at two of our bases confirmed that when use of a government mess is made optional for all members, the utilization rate is not affected and that the desired positive interaction between NCOs and first termers results.

Our careerists are becoming increasingly aware that they subsidize the food service operation because operational requirements and other considerations preclude them from partaking of 40% of the meals authorized in a government mess. Aggravating the inequity is the fact that members on meal cards are not reimbursed for the meals they miss, even when official duties (e.g., firefighting, launching aircraft) preclude meal attendance.

The reason the Air Force has again requested $11.9 million for career BAS is to communicate the importance of this initiative to the retention of highly qualified enlisted careerists. Denying BAS has serious, negative impacts on the quality of life and acts as a career disincentive for our members, especially critically needed mid-level managers.

LONG TERM COSTS FOR FAMILY SUPPORT CENTERS

QUESTION: The Air Force is requesting $7.8 million to expand the number of family support centers from 4 to 13. What are the long-term cost estimates of these centers, and why are they necessary?

ANSWER: Research indicates that family support for the Air Force member's career is a critical factor in the member's career decision. Seventy percent leave the military when the spouse does not support an Air Force career. Reasons identified for spouses not supporting an Air Force career center on inability of existing services to provide required family support. Family Support Centers provide long term, substantive programming designed to positively affect those elements of family life that impact directly upon morale, retention and productivity. Upon full implementation of the Family Support Center program at 124 bases throughout the Air Force, estimated annual operating costs are $30 million per year.

SUPPLEMENTAL REQUEST FOR VEAP AND EDUCATIONAL ASSISTANCE TEST PROGRAM

QUESTION: The Air Force is requesting supplemental funds ($600,000) for Veteran Educational Assistance Program (VEAP) and for the educational assistance test program. Yet, neither of these was contained in the many FY 1982 budget requests. Why weren't they included, and why should we fund them via the supplemental?

ANSWER: During formulation of the FY 1982 President's Budget it was anticipated that the Veterans Administration would request an extension to continue funding and administering the program through FY 1982. However, the proposed legislation was not enacted. DOD is forced, therefore, by current law to fund the program subsequent to December 31, 1981, when VA funding responsibility terminated. If supplemental funding is not approved, the Air Force will have to defer other essential programs to meet this legal requirement.

NEED FOR ADDITIONAL RECRUITMENT SQUADRONS

QUESTION: Last year three recruitment squadrons were added to complement the 32 such squadrons then being used by the Air Force. Does the planned end strength growth of 20,000 necessitate additional squadrons? What effect did the $10 million reduction to recruitment/advertising?

ANSWER: No, the current Recruiting Service organizational structure of 35 squadrons, implemented in FY 1981, is adequate for our planned FY 1983 accession requirements. The planned growth in end strength does not result in an equal increase in numerical accessions due to strong emphasis on our internal retention program. Furthermore, the total recruiting workload is one factor used to determine the required number of squadrons. Other key considerations include chronic critical skill, scientific/engineering, and physician specialist requirements, plus the maintenance of adequate span of control capability from the flight supervisor to recruiters.

The original FY 1982 President's Budget was sized to equate to a greater workload. As the fiscal year progressed, retention improved with a corresponding reduction in accession requirements. Accordingly, we worked out a mutually agreed position with Congress to reprice the budget submission based on the new accession requirements. The recruitment/advertising resources are adequate for our FY 1982 recruiting requirements.

QUESTIONS SUBMITTED BY SENATOR ANDREWS

PRECAUTIONS IN REGARD TO RENEWED THREAT OF SOVIET MISSILES IN CUBA

QUESTION: There is a renewed threat of Soviet missiles in Cuba and severely cutting response time to attack. What precautions are we taking in regard to this new threat? How does this effect our strategy to respond?

ANSWER: The (deleted). In addition, the currently deployed SLBM phased radar (AN/FPS-85) at Eglin AFB FL and its programmed replacement (SE PAVE PAWS) could provide radar coverage of possible IRBMs in Cuba.

In response to this new threat, Strategic Air Command readiness could be changed to provide more rapid response.

F-15 FIGHTERS FOR CONUS AIR DEFENSE

QUESTION: The Air Force is buying F-15 fighters for CONUS Air Defense, yet there is doubt whether a credible threat exists which would warrant such a potent weapon. Given a cost differential of about 4:1 between the F-15 and F-5 and the significant difference in maintenance and availability, could we not achieve very significant savings by buying F-5s for the CONUS air defense role? What would be the extent of such savings over the next 5 and 10 years respectively?

ANSWER: The DoD Air Defense Master Plan submitted to Congress on 9 March identifies a continued Soviet air threat to North America and an assessment of unacceptable risk to our strategic posture if this threat is not countered. Intelligence information on the (d) an approximate Soviet B-1 equivalent, verifies previous threat estimates that the Soviet air threat is being modernized and will remain formidable.

To counter this threat, an all-weather, long range fighter possessing the wide area radar search volume, and multiple kill potential of the F-15 is required to interface with the programmed surveillance network for NORAD.

The current and proposed configurations of the F-5 will simply not provide an aircraft with the range, firepower and radar to operate effectively in a NORAD air defense environment; thus cost comparisons are of little value. If the F-5 were substituted for the F-15, we would find ourselves in a militarily unacceptable situation of committing limited firepower between the defended area and E-3As stationed for surveillance and C^3, and inside the ranges enemy aircraft could launch defense-saturating cruise missiles.

AIR FORCE CAPABILITY TO HANDLE AIRLIFT NECESSITIES

QUESTION: The RDJTF (Rapid Deployment Joint Task Force) is an integral part of our military readiness. How is the Air Force capable to handle the airlift necessities of the mission at present time?

ANSWER: We have estimated that to move a force of (deleted) divisions and (d) tactical fighter wings to Southwest Asia, the airlift requirement for the first 18 days would be about (deleted). Currently, even with full mobilization and immediate activation of CRAF Stage III, we could deliver only about (d) tons. Numerous mobility studies have readily identified shortfalls in airlift movement capability to meet scenario demands. The specific shortfall depends on the scenario assumptions and combat situation. This is true not only of airlift capability to meet RDJTF requirements, but also for our other contingency requirements.

BUDGET OF ONLY 5% REAL GROWTH IN THE DOD BUDGET

QUESTION: The political realities dictate a cut in defense from what President Reagan proposed for FY 83. There have been several suggestions thrown about in the Congress. What would be the impact of only 5% real growth in the DoD budget (assuming the cuts would be across the board) on the Air Force?

ANSWER: The impact of a 5% real growth limitation would be severe enough to cause the Air Force to reexamine the entire budget.

MX AND CIVIL DEFENSE

QUESTION: If we pursue the MX, it will likely be based in the Midwestern part of the country. What precautions will be taken for Civil Defense to insure certain survivability of the populace if a nuclear attack is made on these MX missiles? The civil defense portion of the budget is often criticized as being concerned more with political/economic concerns than survival.

ANSWER: Administration of the U.S. civil defense program is a responsibility of the Federal Emergency Management Agency (FEMA). The Department of Defense and the National Security Council, however, have policy oversight responsibility for the program in order to insure that FEMA's planning for nuclear attack preparedness is appropriately integrated with other strategic nuclear attack planning within the Department of Defense.

Since FY 1981, FEMA has given priority attention to development of civil defense measures for risk areas surrounding U.S. strategic force installations. So far, this effort has focused on development of plans and procedures for relocating the local civilian population into safer host areas. These plans could be executed at the President's discretion during time of intense international crisis. FEMA has advised us that by the end of FY 1982, initial plans for these areas--which include our strategic missile fields--will be 75% complete. If the Administration's proposed civil defense initiatives for FY 1983 and beyond are funded as requested, a fully developed comprehensive population protection capability will be afforded these areas and others by end FY 1989. While no civil defense program can insure certain survivability of the population, the proposed FEMA program will afford the American people a far better chance of surviving a nuclear attack than would otherwise be available.

CURRENT STATUS OF SATELLITE DEFENSE

QUESTION: The term "killer satellites" is tossed about in the press and among defense community personnel. What is the current status of our satellites defense and how do we compare with the Soviet Union?

ANSWER: The US has some capabilities for defense of (deleted) satellites against the Soviet ASAT. (Deleted).

Soviet satellite defense capabilities against the planned US ASAT are not known, but some Soviet satellite survivability is inherent in their space force structure. The Soviets have considerable redundancy in their space forces, shorter lived satellites with more frequent replenishment, and a capability for rapid satellite replacement. Hence, a significant number of Soviet satellites might have to be attacked to negate the satellite system effectiveness.

MAVERICK EXAMPLE OF PENTAGON MISMANAGEMENT

QUESTION: The Maverick missile has been discussed recently as a gross example of Pentagon mismanagement of public funds. It has tremendous cost-overruns and may require two years of further testing to become operational. Is this true and what are the Air Force's plans for this weapon?

ANSWER: To the contrary, the program is an example of positive action taken by the Air Force to prudently manage public funds. It has not experienced tremendous cost overruns and does not require two years of additional testing to become operational.

The present situation is that operational test results show the missile to be effective against the growing armor threat. We are concerned that the missile reliability has not been as high as we would like. Engineering fixes have been designed to correct the problem, but not all have been demonstrated to date.

We added a reliability validation test and reduced planned production in FY 82 and FY 83 until we could determine how well the production missiles work. This approach has caused the unit cost of the FY 82 and FY 83 missiles to be higher than planned; so we will not get all the anticipated benefits from economy of scale or learning. However, we believe our "show me" approach to this procurement will result in a more reliable missile. We are buying training missiles at our planned rate which will enable us to train our aircrews and maintenance personnel. Our initial operational capability should not slip by more than 90 days.

ADMINISTRATION'S BELIEF OF PROTRACTED NUCLEAR WAR

QUESTION: The MX missile system is being constructed, it is said, to counter the gains in accuracy and warhead explosive power of the Soviet land-based missiles. Since the U.S. appears not to expouse "first-strike" or "launch on warning" nuclear strategies the only justification for building the MX seems to be a belief in the "war fighting" theory of the Carter Administration. Is it, in fact, the belief of the present Administration that protracted nuclear wars can be fought, and does the concept of winning such a war have any real meaning? What is the judgement of professional military people as opposed to that of the inhabitants of "think tanks"? If no adequate basic concept can be developed for MX, is it a viable candidate for this "war fighting" role?

ANSWER: This Administration has committed itself to a policy that seeks to deter the Soviets from attacking or coercing the U.S., its allies and friends, by maintaining forces that are capable of holding at risk the full range of Soviet military, political, and economic targets thus denying them the prospect of victory in any war. While Soviet military writings clearly indicate that they would prefer to win any war that might occur in a short period, there is ample evidence of Soviet planning and preparation for a protracted general nuclear war as well. Consequently, to strengthen our deterrent the U.S. should develop and maintain survivable and effective military forces that are capable of denying the Soviets any prospect of advantage in such a protracted war scenario. While one can justifiably question the "winnability" of a general nuclear war, this provides even greater incentive to maintain military capabilities that can credibly deter the initiation of such a conflict.

The near term deployment of the MX in Minuteman silos will strengthen our strategic deterrent. Its highly accurate weapons will be capable of destroying a wide spectrum of Soviet targets including a portion of their "hardest" missile silos and command and control bunkers. While this initial silo deployment of MX will not provide enduring survivability, Soviet planners will not be able to ignore the retaliatory threat posed by these missiles under possible launch on warning or launch-under-attack scenarios, despite the fact that the U.S. has expressly rejected reliance upon such strategies.

QUESTIONS SUBMITTED BY SENATOR STENNIS

FUNDS FOR TWO ADDITONAL KC-10'S

QUESTION: The fiscal year 1982 supplemental request incluldes funds for purchase of two additional KC-10 tanker/cargo aircraft. In addition, the fiscal year 1983 request is for eight aircraft. What in your opinion is the minimum number of airccraft which the manufacturer will consider building in a single fiscal year?

ANSWER: The minimum number that Douglas Aircraft can build and still keep the line operating is eight aircraft per year, provided they have adequate advance funding.

STATUS OF THE CURRENT CONTRACT FOR PROCUREMENT OF KC-10 AIRCRAFT

QUESTION: What is the status of the current contract for procurement of KC-10 aircraft? When must an option be negotiated for procurement of additional aircraft?

ANSWER: The current contract has one fixed-priced-with-escalation option remaining which may be exercised for as few as two or as many as 44 KC-10s. The option expires on 1 December 1982 and requires full TOA authorization and appropriation for a given quantity (e.g. $3.183 billion for 44 aircraft). For that reason, we have decided on a multiyear revision to the present contract. Formal negotiations for this revision, which we estimate will save more than $600 million over an annual buy, should conclude early this summer.

KC-10 AS POTENTIAL CANDIDATE FOR MULTI-YEAR FUNDING

QUESTION: Would the Air Force consider the KC-10 planned procurement of 44 additional aircraft as a potential candidate for multi-year funding? What savings would you estimate could be realized from funding these additional aircraft on a multi-year basis?

ANSWER: A multiyear package is in coordination prior to submittal to the Congress. Included are estimated savings of $215 million over the submitted budget profile and more than $650 million over an annual procurement of the budget profile.

SAVINGS FROM PROCUREMENT OF ADDITIONAL AIRCRAFT

QUESTION: The wide-body market is suffering greatly from the recession. It appears exercise of the option for the additional aircraft may offer substantial savings from what it would cost an airline to purchase a DC-10 aircraft. Is this true? In other words, just how good a deal is the Air Force getting by procurement of the additional aircraft?

ANSWER: The Air Force has realized excellent prices on the KC-10 since the contract was signed in 1977. On the first 16 aircraft, we have been receiving discounts of $10 million per aircraft in base year 1976 dollars. On the overall buy of 44 additional aircraft, the savings over a similar airline buy will be about $15 million per aircraft. Current economic conditions, plus the previous KC-10 competition, have combined to provide these price discounts.

F101 DERIVATIVE FIGHTER ENGINE

QUESTION: The FY 1982 Defense budget requested $35.0 million to extend limited development of the F101 Derivative Fighter Engine (DFE). These funds were to provide a transition to potential full-scale development and maintain the option to provide a competitive alternative in high-thrust fighter engines. The FY 1982 bill provided the full budget request of $35.0 million and added $17.5 million for development work on increasing the thrust of the existing F100 engine. Just how will the $52.5 million be used?

ANSWER: The $35.0 million for the F101 DFE in FY 82 provided a transition to full scale development. In FY 82, the engineering efforts on the F101 DFE shifted to system optimization. The test program will include 150 hours of testing at the Arnold Engineering Development Center and 400 hours of accelerated mission testing. Component testing of items such as the fan, turbine, and fuel control will also be included. Long lead for additional test hardware will also be procured as part of the FY 1982 program. The production configuration of the F101 DFE will be initiated resulting in a common engine design which could be applied to the F-15, F-16, and F-14 aircraft.

The $17.5 million add to the F100 Engine Model Derivative Program (EMDP) was directed toward an increased thrust version of the F100. The following efforts are planned:

a. Using an existing EMDP engine, conduct core hot section testing at higher temperature (necessary for increased thrust) to look at engine durability.

b. Rebuild an engine with new high flow fan and advanced fuel management system to do sea level development testing.

c. Conduct accelerated mission testing (AMT).

d. Complete and test a new anti-icing design.

e. Develop/integrate diagnostics with the digital electronic engine control (DEEC).

FY 83 BUDGET REQUEST FOR EMDP

QUESTION: What does the FY 1983 budget request include for the Engine Model Derivative Program and how will the funds be used?

ANSWER: The FY 83 budget request for the Engine Model Derivative Program (EMDP) is for $10.3 million. $8.3 million is for the F100 engine (F-15/F-16 applications) and $2.0 million is for the TF33 engine (C-141/B-52H applications).

The F100 program will provide a test vehicle to incorporate engine enhancements for operability, durability, and performance margin. This all-up EMDP engine will include an increased air-flow fan, the Digital Electronic Engine Control (DEEC), the increased life core, and the advanced augmentor fuel management system. Extensive durability testing will be accomplished. Arnold Engineering and Development Center planning and facility preparation will be conducted to support altitude testing in early FY 84.

The TF33 program will begin in FY 83 with the initial design of a derivative engine. The design objective is to reduce specific fuel consumption by eight to ten percent. Life cycle cost trade studies will be initiated. Thermal mapping of the TF33 turbine package will be completed. We believe that this program could lead to potential fuel savings of 52 million gallons per year.

REQUIREMENT FOR INCREASED THRUST OVER EXISTING F100 ENGINE

QUESTION: Your response to a question in last year's hearings stated that "The design emphasis has always been on reliability, maintainability, and durability -- not increased thrust." This quote refers to the F101 DFE. Does the Air Force now have, or do you foresee in the future, a requirement for increased thrust over that of the existing F100 engine?

ANSWER: The Air Force currently does not see a need for increased thrust in the derivative engines. Our emphasis and need continue to be on increased reliability, maintainability and durability. The engine for our Advanced Tactical Fighter may require thrust above that which we have in the F100; however, we have a separate line in the budget that funds initial development of the advanced engine.

PRINCIPAL REQUIREMENTS IN CONTINUING FIGHTER ENGINE DEVELOPMENT

QUESTION: Would you say that reliability, maintainability, and durability improvement are the principal requirements in continuing fighter engine development?

ANSWER: Yes. The proposed competition will use those criteria and ensure reduction of overall life cycle costs.

IMPROVE OPERABILITY AND REDUCE SUPPORT COSTS OF THE F100 ENGINE

QUESTION: The Air Force has been engaged in an extensive progam to improve operability and reduce support costs of the F100 engine. I would appreciate a discussion of this program, to include funds expended to date, funds requested in the FY 1983 budget and projected out-year budget requests. I am also interested in the status of the program relative to the goals established and future expectations.

ANSWER: The primary program which addresses improving the operability and reducing the support costs of the F100 engine is the component improvement program (CIP). CIP does this through developing improvements in engine durability, maintainability, operability, reliability, reparability, and suitability. These improvements are necessary as the operational conditions change and service time is accumulated on the engines.

The Air Force expects to have spent approximately $325 million through FY 82 on the F100 CIP. The FY 83 President's Budget contains $61 million more. While this will be a continuing program for the life of the engine, we estimate that $223 million will be needed for FY 84-87.

The Air Force has made, and will continue to make, significant progress in pursuing goals to make the F100 more operable and less expensive to support. Key among these goals are:

1. Stall/stagnation rates were reduced from a high of almost 10 per

1000 engine flight hours (EFH) in 1975 to less than two for the F-15 and less than .2 for the F-16 today.

2. Turbine reliability has improved from an average incident rate of over 1.5 per 10,000 EFH in 1979 to less than 0.5 today.

3. Core life has improved from the original 900 cycles limit for depot return to the current 1350 cycles. An 1800 cycle limit is under evaluation for 1982 and a 4000 cycle limit is the 1985 goal.

4. Maintenance man hours (MMH) per EFH were reduced from 3.4 per EFH in 1979 to a current 2.4. Our goal for 1985 is 2.0.

5. Unscheduled engine removal rates were reduced from 7.59 per 1000 EFH in 1978 to 7.39 in 1980. Our goal for 1985 is 6.0.

The F100 CIP has provided the AF with many tangible benefits as evidenced by the previous figures. In terms of savings, the CIP has produced engineering changes which will result in over $3 billion of life cycle cost avoidance.

FLIGHT ENVELOPE RESTRICTIONS

QUESTION: Have the flight envelopes of the F-15 and F-16 aircraft been restricted because of engine deficiencies? If this is so, please explain why.

ANSWER: No.

PRODUCTION OF THE F101 DFE

QUESTION: Do you still expect to make a decision regarding production of the F101 DFE after results of the FY 1982 test programs are available? If so, in what time frame will this decision be made? When could the first production engine be available?

ANSWER: The FY 83 proposed budget initiates full scale development of the F101 DFE. The test results continue to be very positive and support our position that the F101 DFE should be developed to establish a competitive alternative to the F100 to allow competition into the nineties. Assuming a competition in FY 83 and that FSD results indicate an acceptable level of risk, a production F101 DFE could be available as soon as late 1984.

PROBLEM AREAS FOR LARGE HIGH-THRUST FIGHTER AIRCRAFT ENGINES

QUESTION: There is basically agreement on three major problem areas relative to the program for large high-thrust fighter aircraft engines: Engines have been placed in production long before their development has been completed; past emphasis has been placed on engine performance at the expense of reliability, maintainability and durability; and there has been insufficient sustained competition in the acquisiton of advanced fighter aircraft engines. Do you feel that your program for the utilizaton of the funds provided in FY 1982 and FY 1983 and out-year requests consider these problems and will provide solutions to them?

ANSWER: We are acutely aware of the three concerns you mentioned and our FY 82 budget and FY 83 proposed programs address them directly. We expect to obtain the best possible utilization of funds by competing engines at their present thrust/weight levels with reliability, maintainability, operability, and durability as the criteria for evaluation. These criteria will be demonstrated by testing prior to production and will be backed by contractor warranty.

FULL FUNDING FOR DEFENSE SUPPORT PROGRAM IN FY 1983/1984

QUESTION: The fiscal year 1983 budget reflects full funding for the Defense Support Program in Fiscal Years 1983 and 1984. How much will be saved by this acquisition method as opposed to full funding of the program in fiscal year 1983?

ANSWER: No money will be saved by full funding Defense Support Program satellites in Fiscal Years 1983 and 1984 as opposed to full funding of the program in Fiscal year 1983; however, $64 million will be saved by this method as opposed to our normal acquisition method of buying one satellite per year.

ABRV ESSENTIAL FOR M-X

QUESTION: General Allen, last year you indicated that the Mark 12A reentry vehicle which is being deployed on a portion of the Minuteman III force is a logical candidate for the M-X. Why have you decided that a much-improved Advanced Ballistic Reentry Vehicle (ABRV) is essential for the M-X?

Since the presentation of the October 2 plan, the ABRV has been proposed as the replacement for the MK-12A on the M-X missile. Why wasn't the ABRV decision made a part of the October 2 Strategic forces package of the President?

ANSWER: The ABRV decision was made following an extensive review and examination of costs and benefits. As the review was still in progress at the time of the President's October 2 decision, the ABRV was not included as part of the Strategic Forces Modernization Plan.

The Air Force supported MK 12A as the baseline M-X reentry vehicle prior to the OSD decision to proceed with development of the ABRV. The basis for this support was schedule and cost. When initially proposed, ABRV would not have been ready until some 18 months following the M-X IOC. Time required to develop the arming and fuzing system was the cause of this delay.

The schedule problem was eased in two ways. First, restructuring of the M-X program in response to the President's decision of October 2, 1981 caused the system IOC to shift from July 1986 to later in the year. Secondly, it was determined that an arming and fuzing system being developed by the SANDIA National Laboratory could be used, allowing us to develop and procure the ABRV in time to meet the late 1986 M-X IOC.

As for cost, funding for FY 1983 and beyond was provided to the Air Force at the time the decision to proceed with ABRV was announced. A supplemental appropriations request for $57 million has been proposed to cover FY 1982 ABRV work.

With removal of these two concerns, we support the ABRV and the benefits it brings to the M-X program.

ADDITIONAL COST TO DEVELOP ABRV

QUESTION: Is it true that it will cost an additional $1 billion to develop the ABRV to operational capability?

ANSWER: The ABRV cost increment over the MK 12A baseline is approximately $881 million in FY 82 constant dollars. However, there are factors which tend to balance out cost to the government of shifting to ABRV. First, the ABRV uses significantly less nuclear materials than the MK 12A at equivalent yield. This produces savings of approximateley $500 million ($ FY 1982). Secondly, we would have been required to add an improved fuze to the MK 12A if it had been retained as the M-X baseline system. This would have increased costs for the MK 12A by approximately $259 million ($ FY 1982).

AVAILABILITY OF ABRV

QUESTION: Do you believe it is possible to have the ABRV available by 1986 to meet the IOC date for the M-X missile? Last year, we were told that late 1987 was the earliest possible availability date for the ABRV.

ANSWER: Last year our schedule estimates indicated that the ABRV would not be available for M-X deployment until late 1987. Since that time, schedule problems have been eased in two ways. First, restructuring of the M-X program in response to the President's decision of October 2, 1981, caused the system IOC to shift from July 1986 until later in the year. Secondly, it was determined that an arming and fuzing system being developed by the SANDIA Corporation could be used, allowing us to develop and procure ABRV in time to meet the late 1986 IOC.

MK-12A VERSUS THE ABRV

QUESTION: How would you assess the performance differences of the MK-12A versus the ABRV? Does the larger yield of the ABRV make that much of a difference?

ANSWER: At equivalent yield, the ABRV and the MK 12A have similar effectiveness. Further, at the programmed M-X CEP of (deleted) a yield of (deleted) is adequate against even very hard targets.

The Strategic Air Command has consistently supported the ABRV at a yield of (deleted). They believe that the higher yield helps to overcome targeting uncertainties such as hardness, location and possible accuracy problems.

The ABRV does, indeed, provide a hedge in this regard. Should M-X accuracy degrade, or should Soviet target hardness improve, the ABRV can be increased in yield. For example, if M-X accuracy were to degrade into the (deleted) range, increasing yield could maintain target damage at acceptable levels. This cannot be done with the MK 12A.

INCORPORATE ADDITIONAL MK-12A REENTRY VEHICLE ON M-X

QUESTION: The proposed ABRV is heavier than the MK-12A. Has the Air Force considered the possibility of incorporating an additional MK-12A reentry vehicle on the M-X? What would be the effectiveness improvements of doing this?

ANSWER: The ABRV will be somewhat heavier than the MK 12A; however,over analysis shows that the range and footprint of the M-X, when loaded with the heavier ABRV is more than sufficient to cover the Soviet/Warsaw Pact target base. This same analysis shows that the M-X is capable of delivering either (deleted) but would be unable to deliver more RVs of either type.

(Deleted).

The only real difference in military utility comes from the difference in the maximum possible yield between the two RVs. Should M-X accuracy be less than currently envisioned or should characteristics of the target structure change, the ABRV provides a hedge for preserving military effectiveness through increased weapon yield.

CONTINUATION OF CRAF

QUESTION: There are no funds budgeted for continuation of the Civil Reserve Air Fleet (CRAF). Is it the Defense position that further efforts toward enhancement of airlift capability by the civilian carriers will not be pursued?

ANSWER: Although no funds are budgeted for the CRAF Enhancement Program in FY 83, funds are programmed for FY 84 and beyond. The Department of Defense recognizes that the CRAF Enhancement Program is the most cost effective method available to obtain additional bulk/oversize cargo airlift for emergencies calling for full mobilization.

The requirement for additional organic airlift capability available across a spectrum of conflict and the relatively high cost of the most recent offers for CRAF retrofit prompted the action to delete FY 83 funding.

However, FY 83 funding may be considered in response to an attractive offer. In addition, a Request for Proposal will be issued in time to make use of FY 84 funds.

PLANS FOR PRIOR YEAR FUNDS FOR CRAF

QUESTION: There is approximately $121 million available from prior years programs for CRAF that have not been obligated. What are your plans for use of these funds?

ANSWER: CRAF Enhancement Program funds from FY 80, 81, and 82 which have not been obligated are targeted for reprogramming or reappropriation, as necessary, to support FY 82 advance procurement for the C-5B.

PROPOSAL TO ELIMINATE THE DEPOT MAINTENANCE BACKLOG

QUESTION: The Air Force fiscal year 1983 budget proposes to eliminate the depot maintenance backlog. Is this really efficient to do from an economical scheduling standpoint? Wouldn't it be desirable to reduce this backlog over a period of several years rather than input a large amount of work in a single year?

ANSWER: No. The depot maintenance backlog at issue is $11.9 million of FY 1981 requirements that carried forward to FY 1982. This backlog is not large; it represents less than one percent of the FY 1982 exchangeable component repair funding reflected in the budget.

Deferral or planned accumulation of reparable spares in an attempt to process "economical lots" of backlogged repairs would not be operationally, or cost effective as our spares procurement policy relies on rapid transportation, materials handling and depot repair to offset a smaller inventory of spares. This reliance on a quick response logistics system allows us to turn over our inventory of investment items more than twice each fiscal year in support of operational requirements. Thus, to allow a backlog of required repairs to accumulate and then space its reduction over several years will deny operating units the use of needed serviceable assets.

VALUE OF DEPOT MAINTENANCE BACKLOG

QUESTION: Just how much is the value of the backlog that existed at the end of fiscal year 1981 and is projected to exist at the end of Fiscal Year 1982?

ANSWER: The fiscal year 1981 backlog is $11.9 million and the projected year-end backlog for fiscal year 1982 is zero.

ACCOMMODATING DEPOT MAINTENANCE BACKLOG

QUESTION: Can the backlog be accommodated within a single fiscal year without impacting operational plans and capability?

ANSWER: Yes. The depot maintenance backlog addressed in the President's Budget pertains to a FY 1981 exchangeable component repair backlog of $11.9 million. This backlog and projected FY 1982 requirements are fully financed in FY 1982. Thus, the FY 1983 resource request supports only that fiscal year's requirements. Operational capability impacts occur when repair requirements to support operational needs are not fully funded.

ADDITIONAL PERSONNEL TO ACCOMMODATE DEPOT MAINTENANCE BACKLOG

QUESTION: Aren't we putting ourselves in a position where substantial additional capability in terms of personnel must be made available for a single year to accommodate the backlog and then these personnel will once again be looking for work after the "boom" period is over?

ANSWER: No. The backlog in question is only $11.9 million of FY 1981 requirements that carried forward to FY 1982. A little more than half of this backlog is contract workload. The remaining organic workload will be accommodated through overtime and employment of non-permanent employees already on the payroll. We foresee no "boom" period to eliminate this modest backlog which, on the average, is less than two workdays of organic production.

PLANS FOR THE B-52D FLEET

QUESTION: What are your plans for the B-52D fleet which is capable of performing the conventional bombing mission? The fiscal year 1982 appropriations act included funds to continue this fleet throughout the year. Are funds contained in the fiscal year 1983 request to continue this capability?

ANSWER: We will continue to operate some B-52Ds until the B-1B becomes available in FY 86. Three B-52D squadrons are scheduled for retirement in early FY 83/1, with the last two squadrons retiring in FY 85/4 and FY86/4 respectively.

We will modify 67 B-52Gs in FY 83 and 84 to carry 51 conventional bombs each. This will provide a conventional bomber force superior to the B-52D in range, ECM, and accuracy.

MAINTAINING AND IMPROVING THE B-52 FORCE

QUESTION: Is any portion of the $2.1 billion request contained in the fiscal year 1983 budget for maintaining and improving the B-52 force designated for the B-52D fleet or to modify G or H model aircraft for the conventional bombing mission?

What is your estimate of cost to modify the B-52 G and H fleet to accommodate the conventional bombing mission?

ANSWER: $91.7 million is included in the FY 83 O&M and Military Personnel accounts for support of B-52Ds.

Thirty five B-52H aircraft have been modified for conventional carriage at a cost of $2.0 million in FY 1981 and FY 1982. $6.5 million in FY 1983 aircraft procurement funds, $1.5 million FY 1983 O&M, funds and $1.5 million FY 1984 O&M funds are requested for conventional carriage modifications on 67 B-52G aircraft.

COMMENT ON THE NAVSTAR GLOBAL POSITIONING SYSTEM

QUESTION: Would you comment on the NAVSTAR Global Positioning System. Do you continue to have strong faith in this system and its ability to contribute to the effectiveness of many other DoD programs?

ANSWER: Yes, the Navstar Global Positioning System (GPS) will make critical contributions to the effectiveness of many other systems.

Whether improving (deleted) GPS will dramatically increase our combat effectiveness. It will also significantly increase the capability of certain national intelligence collection systems. By carrying Integrated Operational Nudet Detection System (IONDS) sensors on its satellites to accomplish rapid detection and accurate geopositioning of nuclear detonations, GPS will provide an essential warfighting capability for the Strategic Air Command.

CONVERSION OF F-106 SQUADRONS TO F-15 AIRCRAFT

QUESTION: When will the converson of the five active F-106 squadrons to F-15 aircraft be completed? Will the F-106 aircraft then be provided to the Reserve Forces?

ANSWER: We plan to complete the phase out the F-106 from the active force by the end of fiscal year 1986. These aircraft will be retired, not transferred to the Air National Guard. The retirement of the F-106 from the Air National Guard is planned to begin in fiscal year 1987.

OPERATIONAL CAPABILITY DATE FOR GLCM

QUESTION: Do you continue to have faith that the December 1983 introduction to operational capability date for the Ground Launched Cruise Missile (GLCM) will be met?

ANSWER: Yes. Several factors provide positive indications that the December 1983 initial operational capability (IOC) date will be met. These factors are the ongoing flight test and military construction programs, and the Department of Energy's (DOE) development of the GLCM W-84 warhead.

On February, a combined contractor and Air Force test team successfully launched a TOMAHAWK missile from the first preproduction prototypes of the transporter erector launcher and launch control center. Another successful GLCM launch occurred on 25 March, which completed the contractor testing phase. Air Force flight testing begins in late April 1982.

Military construction began in November 1981 at Greenham Common in the UK. This construction of operational and support facilities is on schedule to meet the December 1983 IOC.

All underground testing of the W-84 warhead has been completed satisfactorily. The DOE is also a major participant in the ongoing GLCM flight test program in order to verify electrical and mechanical compatability of the warhead with the missile system.

RESULTS OF RECENT FLIGHT TESTS FOR GLCM

QUESTION: What were the results of the recent flight tests which were scheduled for February 1982?

ANSWER: The data gathered during the 25 February 1982 TOMAHAWK flight has not been fully analyzed yet. However, preliminary results are very favorable, and significant milestones were achieved.

The flight was the initial launch by the first preproduction prototypes of the GLCM transporter erector launcher and launch control center. It demonstrated the capability of Common Weapon Control System software to successfully launch and control a TOMAHAWK using mission data generated by the GLCM theater mission planning system.

The one hour and fifty-four minute flight was flown at the Dugway Proving Ground in Utah. The missile guidance system completed seven of seven valid terrain contour matching updates and two passes over the target with a W-84 warhead flight test unit. The mission included 670 nautical miles in a terrain following mode.

GLCM SOFTWARE DELIVERY DELAYS

QUESTION: Does it appear that the software delivery delays have been overcome?

ANSWER: No. The potential for additional software delivery delays will always exist in this critical development area. However, progress has been made.

Version 2.0 software was delivered in December 1981 which allowed testing to begin in February 1982. Two successful TOMAHAWK missile launches have occurred since. Although this software is a more simplified version of what is scheduled to be developed, it nevertheless has proven it can successfully launch GLCM.

QUESTIONS SUBMITTED BY SENATOR HUDDLESTON

CURRENT PROJECTION OF IOC DATE FOR SPACE SHUTTLE

QUESTION: What is your current projection of the IOC date for the Western Launch facility for the space shuttle at Vandenberg?

ANSWER: Oct 85 is the current IOC date.

NEED FOR WEATHER SHELTER/WIND SHIELD

QUESTION: Recently we learned of the need for construction of a massive weather shelter/wind shield for shuttle launches from Vandenberg. Wind conditions in the area are well known to the Air Force. Why wasn't this need identified earlier? Are there any other costly surprises awaiting us in the near future?

ANSWER: The Shuttle Assembly Facility (weather shelter) is required to solve two problems in the launch pad design which surfaced last year:

(1) The design for the erection of the Orbiter (lifting the Orbiter off the transporter and rotating it to the vertical) was invalidated by weight growth in the combination of the Orbiter, the strong back required to hold the Orbiter rigid, and the mechanism which lifted and rotated the Orbiter/strongback.

(2) The design concept for the mating of the Orbiter to the previously stacked External Tank and Solid Rocket Boosters was invalidated when the tolerances for the mating process were reduced from the preliminary 1/4" to 1/8" to the final 1/32" based upon the experience derived from the first Shuttle flight (Apr 81). This reduction invalidated the design for the existing wind conditions at Vandenberg.

After extensive study by a combined NASA/AF team and three independent contractor evaluations, it was determined that:

- The best approach to solve both problems was to mimic the operations at Kennedy Space Center.
- To mimic these operation required the use of two large overhead cranes for erecting and mating the Orbiter and absolute control over the environmental conditions during the mating sequence.
- One crane was available at Vandenberg in the existing Mobile Service Tower. The mounting of the remaining crane and the environmental control requirement required the addition of a facility large enough (with the Mobile Service Tower) to encapsulate the launch mount area and strong enough to mount the second crane.

We do not believe there will be additional MILCON requirements since we are now conducting Shuttle operations from Kennedy. That operational experience has not demonstrated the need for any facilities beyond those identified.

AIR FORCE'S CURRENT POSITION ON FIFTH ORBITER

QUESTION: What is the Air Force's current position on the need for a fifth orbiter?

ANSWER: For a viable National Space Transportation System, the country should build five Orbiters and maintain the capability to produce others while we: (a) gain operational experience with the abilities of the Shuttle, (b) refine our estimates of Orbiter attrition, and (c) refine the estimates of launch demand compared to traffic capacity of the existing fleet.

ACCOMMODATION OF PAYLOAD REQUIREMENTS

QUESTION: For some DoD missions, weight has been a concern. Are you satisfied that your payload requirements can be accommodated using the current fleet and the weight reduction activities already undertaken?

ANSWER: Some payloads have been designed to the original payload delivery specifications of Space Shuttle Vehicle (SSV). The current performance estimates for the SSV are below the original payload delivery specifications.

NASA projections for the performance gain with the lighter-weight, follow-on Orbiters and weight reduction activities still do not meet the original performance specifications. Hence, there is a requirement for the performance recovery actions termed "Performance Augmentation" which will return the SSV to its originally specified performance.

These actions will benefit all payloads which have been designed to the originally specified performance and will allow NASA to manifest mixed payload Shuttle flights up to the originally specified performance limits.

WEIGHT OF COLUMBIA

QUESTION: Do you have any comments on the recent report that indicated the scales showed the orbiter Columbia more than a ton heavier than it actually is?

ANSWER: The scales are being corrected to read accurately.

SOLAR MAXIMUM MISSION

QUESTION: Would the Solar Maximum Mission (SMM) proposed by NASA demonstrate any capability of direct importance and application of Defense missions?

ANSWER: Yes, in addition to placing a valuable satellite back in operation, the Solar Maximum Mission will demonstrate Shuttle capabilities which have value to Defense and civil missions. These capabilities include:

- Rendezvous with the SMM satellite.
- Extra-vehicular activity (EVA) which places significant demands on both the man and his maneuvering unit to grab and stabilize a tumbling satellite.
- Use of the remote manipulator system (RMS) to grapple the satellite.
- Use of RMS to place the SMM satellite in its cradle.
- EVA to remove and replace the failed components, i.e., on-orbit repair.
- Checkout of the repaired satellite.
- Return the SMM satellite to its operational orbit.

We have Defense missions which require retrieval of the orbiting satellite for refurbishment and reflight. Many of the specific tasks to be performed on the SMM are directly applicable to our missions--as well as to important civil missions like Space Telescope.

Perhaps more important, the SMM repair will give us time to solve any problems which develop before we must recover a critical Defense spacecraft. Consequently, we may learn enough from the SMM repair to avoid problems (perhaps including loss of a satellite) on future Defense and civil missions. Further, a successful demonstration will increase the confidence of our satellite program managers and thus is likely to hasten the exploitation of Shuttle-unique capabilities.

CURRENT STATUS OF INERTIAL UPPER STAGE

QUESTION: What is the current status of the two-stage Inertial Upper Stage (IUS)?

ANSWER: The Inertial Upper Stage (IUS) development program is proceeding on schedule for the Sep 82 launch on a Titan III (34)D and the Jan 83 launch in the Shuttle. The program is successfully meeting all of its performance requirements in all of the developmental and qualification tests. In short, we believe it will perform as expected.

Initial IUS production is awaiting approval of the Air Force requested reprogramming.

NEED FOR TWO STAGE IUS

QUESTION: How many missions require it and are you on-schedule?

ANSWER: The Air Force plans to use the Inertial Upper Stage (IUS) for all missions requiring a large capacity upper stage. The first of these missions is scheduled for a Sep 82 launch on a Titan launch vehicle. Additional IUS missions, averaging about four per year, will follow through FY 87-88. Most of these missions will use the Shuttle as the launch vehicle.

Additional IUS vehicles are being purchased by NASA for use with the Tracking and Data Relay Satellite System (TDRSS) and two planetary missions (Galileo and International Solar Polar). These NASA, Shuttle-launched missions will begin in Jan 83 with the launch of TDRSS-A.

All of the IUS vehicles now on contract are on schedule.

NEED FOR A HIGHER ENERGY UPPER STAGE

QUESTION: There have been a number of references to the need for a higher energy upper stage as a follow-on to the IUS. Would you explain this need? When do you think such a capability would be necessary? How much is in the fiscal 1983 budget request for such a program?

ANSWER: The prime basis for the HEUS requirement is the growth in the payload weight requirements. That growth is driven by the following pressures:

- Demands for higher reliability and for avoiding high launch/procurement costs have driven the requirement for longer on-orbit life. That, in turn, will lead to payload weight growth to provide the necessary on-orbit expendables (propellants, etc.) for longer lifetimes.
- The unique synergy allowed by the vantage point of space coupled with the desire to reduce the overhead cost (e.g. launch cost) has led to the growth of multimission platforms or prime mission platforms with numerous secondary payloads. This combination of missions/sensors will cause further payload weight growth.
- Additional survivability measures are required to protect high-value assets on-orbit. The threat to our high altitude platforms has grown and their value has increased commensurate with the growing dependence on space systems. The growth of multimission platforms has increased the target value of any one platform. Additional survivability provisions (e.g., propellant for maneuver, hardening) will be required — with an attendant growth in payload weight.

There is also an opportunity to exploit a previously denied technology for Shuttle upper stages. NASA has abandoned the prohibition on liquid fueled upper stages in the Shuttle based upon their growing confidence in the safety and stability of the Shuttle. The more energetic liquid fuels will allow significant performance increases.

The capability is needed by late FY 87.

There are no funds in the FY 83 budget request for the program. The Air Force has submitted a reprogramming request for FY 82 to begin the program. An FY 83 reprogramming request will be submitted to seek funds to continue the program.

FUNDING PROFILE FOR HIGHER ENERGY UPPER STAGE

QUESTION: What is your funding profile for such a program?

ANSWER: We are developing the funding profile now. Our estimates for the funding range from $400-500M (based upon the NASA Centaur estimates) to $1B (based upon the IUS experience). The eventual estimate will depend heavily on how much existing technology is included in the Higher Energy Upper Stage design.

CENTAUR OPTION

QUESTION: The Air Force and NASA have reviewed the IUS/Centaur options several times. Why has the Air Force rejected the Centaur option?

ANSWER: DoD has not rejected the Centaur. The Higher Energy Upper Stage (HEUS) is a 10,000 lb class upper stage to be available in FY 87. Centaur is a competitor for the HEUS, and we intend for the HEUS to be a competitive procurement.

DoD rejected a specific Centaur proposal that required acceptance of inordinately high levels of risk to its near-term launch requirements to assure the availability of the Centaur for a NASA planetary mission. Specifically, the DoD declined to participate in a scheduled constrained development program leading to a Centaur available for the NASA Galileo launch in Oct 85.

EXPLAIN STATEMENT ON CENTAUR

QUESTION: Air Force officials have said that Centaur "does not envelop the Defense payload requirements". Please explain that statement.

ANSWER: The Centaur is configured to meet the requirements of NASA planetary exploration flights. Because of the number and variety of Defense missions, we place an additional set of demands on the upper stage. These DOD payload requirements include:

(1) High accuracy for orbital injection
(2) Maximum launch reliability (i.e., redundant avionics)
(3) Spacecraft load alleviation
(4) Orbiter bay loiter capability
(5) Adequate payload length provisions
(6) Other payload electrical/mechanical interface provisions

However, the specific technical approaches needed to incorporate these generic requirements into the Centaur have not been defined. This step would likely require 9-12 months to complete. This time period would be used to: put the generic requirements into specific contractual/technical language; define the Centaur-unique technical implementation approaches; assess the ability of those approaches to meet the requirements; and authorize the contractor to proceed. During the same 9-12 month period we would have to also evaluate the spacecraft program modifications needed to interface with the Centaur, obtain funding, and authorize the spacecraft contractors to proceed with modifications. Only then could a program to modify Centaur be undertaken with confidence.

SCHEDULE AND FUNDING PROFILE FOR MILSTAR

QUESTION: Please provide a schedule and funding profile for the entire MILSTAR program.

ANSWER:

FUNDING

The following is the development funding for the MILSTAR satellite and the Air Force terminals ($M):

FY 83	FY 84	FY 85	FY 86	FY 87
79.8	256.8	432.4	393.8	309.1

These funds will not satisfy the full set of requirements on a (deleted). The possibilities to resolve this funding shortfall are to delay the first launch, or to first launch a satellite which meets a reduced set of requirements and then upgrade satellite performance later in the program. We are in the process of examining these alternatives.

SCHEDULE

- Engineering Development Contract Award: FY 83
- (Deleted)
- (Deleted)

TECHNOLOGY USED IN MILSTAR VS TECHNOLOGY NASA PROPOSES

QUESTION: How does the technology to be used in the MILSTAR program differ from the technology NASA proposes to test in their examination of advanced communications satellites, specifically the "30/20 GHz program"?

The Japanese government has underway a program to demonstrate use of the same frequency spectrum; NASA is considering the 30/20 program. Does MILSTAR do anything that these other satellites would not do?

ANSWER: As we understand it, the goal of the NASA 30/20 GHz program is to demonstrate new techniques and technology for high data rate fixed earth terminal communications. For NASA, high anti-jam performance levels and physical survivability will not be major objectives.

MILSTAR technology, on the other hand, will be directed toward satisfying low data rate, high anti-jam, high survivability (deleted) requirements for widely dispersed mobile military users.

Additionally, the MILSTAR system will use the 44 GHz portion of the Radio Frequency Spectrum for uplink transmissions (not 30 GHz) because extra band width is available to provide added anti-jam performance at this frequency. EHF (44 GHz) components (relative to 30 GHz) are small and are better suited to the communications needs of mobile users, where weight and space are at a premium.

CHANNELS FOR MILSTAR

QUESTION: How many channels will be provided for in MILSTAR? Will they be expected to carry information other than voice, such as full motion video? What will be the required bit rate?

ANSWER: Fifty EHF channels and four UHF channels are being planned for MILSTAR. They will be primarily used to carry 2.4 KBPS voice/data and 75 BPS data traffic.

EARTH STATIONS TO WORK WITH MILSTAR

QUESTION: Will the earth stations being designed to work in conjunction with MILSTAR be capable of processing wide-band signals?

ANSWER: No.

DESIGN OF MILSTAR

QUESTION: Will the design of MILSTAR incorporate narrow-beam attennas on the spacecraft? Will beam-switching technology be tested?

ANSWER: The MILSTAR will use narrow beam antennas and beam switching technology.

MILSTAR'S EMPLOYMENT OF REGENERATIVE PROCESSING TECHNIQUES

QUESTION: Does MILSTAR employ regenerative processing techniques?

ANSWER: Yes.

WIDE-BAND CROSS-BAR SWITCHES FOR MILSTAR

QUESTION: Does MILSTAR incorporate wide-band cross-bar switches to interconnect its beam?

ANSWER: No.

CIVILIAN PROGRAM BENEFICIAL

QUESTION: NASA's primary goal in doing applied Research and Development in communicatons is to assist U.S. industry in maintaining their preeminence. Do you believe the civilian program is beneficial?

ANSWER: Yes. Much of the technology developed by NASA programs is also applicable to military needs. An example is the NASA work in 20 GHZ Traveling Wave Tube Amplifiers and solid state amplifiers. A broad, well established technology base within American industry is a definite asset to both military and civilian communications development programs.

EXPERIMENTING WITH MILSTAR

QUESTION: Is there any way the U.S. common carriers could be afforded the opportunity of experimenting with MILSTAR?

ANSWER: The MILSTAR system is being designed as the war fighting satellite communications system for the late 1980's and beyond. Because of its military design for low data rate communications and anti-jam protection features, the system would have little utility to the common carriers. Changes to allow civilian/commercial use would severely compromise the military effectiveness of the system. However, some of the technology required for MILSTAR is applicable to commercial satellite communications and will undoubtedly find its way into future commercial communications satellites.

EXPLAIN STATUS OF DSCS II AND DSCS III

QUESTION: You have a request of $192 million for procurement and $53 million for R&D. Would you elaborate on this request and explain where we are in terms of DSCS II and DSCS III?

ANSWER: The last two DSCS II spacecraft to be procured are in storage. Each will be launched paired with a DSCS III spacecraft. The first DSCS III developmental model spacecraft completed testing and has been in storage since June 1981. The launch of this spacecraft, paired with a DSCS II is planned for September 1982.

The FY 1983 procurement request funds the procurement of two DSCS III production spacecraft, launch vehicle hardware and Aerospace Corporation support.

The FY 1983 R&D request funds the first time integration tasks required to mate the DSCS II/DSCS III spacecraft with the planned launch vehicles, system level qualification of the last developmental spacecraft, upgrades to the current DSCS III configuration, performance incentives to the contractor, storage and launch preparation tasks associated with the planned launch in late 1983.

SERVICE COVERAGE FOR DSCS II AND DSCS III

QUESTION: At this point in time, what type of service coverage are you anticipating during the 1983 time frame which has concerned many of us?

ANSWER: Currently there are six DSCS II satellites on orbit, four operational and two spares. In September 1982, we are planning to launch the first DSCS III developmental spacecraft paired with one of the last two DSCS II satellites. Thus, at this time the projection is that the DSCS space segment will be maintained at a high level of availability throughout 1983.

SUBCOMMITTEE RECESS

Senator STEVENS. The subcommittee will stand in recess until 9 a.m. on Tuesday, March 23, when we will have the Army budget overview.

Secretary ORR. Thank you for your courtesy, Mr. Chairman.

[Whereupon, at 11:40 a.m., Thursday, March 18, the subcommittee was recessed, to reconvene at 9 a.m., Tuesday, March 23.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1983

TUESDAY, MARCH 23, 1982

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9 a.m. in room 1114, Everett McKinley Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Andrews, Kasten, Rudman, and Stennis.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE ARMY

STATEMENT OF JOHN O. MARSH, JR., SECRETARY OF THE ARMY

ACCOMPANIED BY:

- **GEN. EDWARD C. MEYER, CHIEF OF STAFF, U.S. ARMY**
- **MAJ. GEN. E. J. DELAUNE, JR., DIRECTOR OF ARMY BUDGET, OFFICE OF THE COMPTROLLER OF THE ARMY, DEPARTMENT OF THE ARMY**

BUDGET REQUEST

Senator STEVENS. This is the time scheduled to conduct an overview of the Army's fiscal year 1983 budget request for programs and activities funded in the Defense appropriations bill. The request totals $58.5 billion, and that is an increase of nearly $9.2 billion over appropriations to date for the current fiscal year. This is an increase of about 18 percent in current dollars, reflecting real growth of about 11 percent if we use the Army's composite calculation of inflation. Budgeted outlays for fiscal year 1983 total $51.7 billion, an increase of $8.6 billion, or up about 20 percent over the 1982 estimates, excluding supplementals.

SUPPLEMENTAL REQUEST

There is also pending before the subcommittee a program supplemental appropriation request of $636 million, and the administration is expected to send up another supplemental request to address the Army's estimated $2 billion in pay costs arising from the 1982 increase in pay for military and civilian personnel.

COMPARATIVE TABLE

As with the other services to date, the statements and information submitted in advance of the hearing do not address the specific appropriations and outlays involved in the Defense appropriations bill. We will therefore ask and urge the Army to submit for the record a comparative table displaying 1982 and 1983 funding, by appropriation account, including budget authority and outlays with changes displayed in dollars and percentages. The table should be organized so that program and pay supplementals and contingencies are shown separately.

[The table follows:]

BUDGET OVERVIEW

GENERAL

The Army FY 1983 budget is $60.7 billion Total Obligational Authority (TOA), which requires Budget Authority (BA) of $60.6 billion and Outlays of $53.2 billion. The following table shows the FY 1983 request in current and constant dollars in comparison with FY 1982 and FY 1981.

Department of Army
Budget Comparison
($B)

Current Price	1981	1982	% Increase 81-82	1983	% Increase 82-83
TOA	43.2	51.0	18.1%	60.7	19.0%
BA	43.2	50.7	17.1%	60.6	19.5%
Outlays	37.6	44.1	17.3%	53.2	20.9%
Constant FY 1983 Price*					
TOA	48.5	54.9	12.8%	60.7	10.4%
BA	48.5	54.6	12.2%	60.6	10.6%
Outlays	43.5	48.6	11.7%	53.2	9.5%

* Percent increases include distribution of Department of Defense contingency funds.

Our FY 1982 TOA level consists of the amount appropriated to the Army and a program supplemental request. The FY 1982 TOA appropriation does not include the FY 1982 military and civilian pay raises. A pay supplemental will be submitted in early spring.

The FY 1983 TOA request includes $58.5 billion before the Defense Subcommittee and $2.2 billion before the Military Construction Subcommittee. If we add the Army's share of the Department of Defense contingency for military and civilian pay raises and pending legislation of $1.6 billion, the total Army TOA portion of the Department of Defense request becomes $62.3 billion. In addition, although not shown in the Army portion of the Defense Budget, the Army's share of Defense appropriations for Retired Pay is $5.5 billion; and Claims, $0.1 billion.

Track from FY 1982 Enactment

The Army FY 1982 Budget has a net increase of $0.6 billion since enactment. This net increase includes $0.7 billion for programmatic increases which were submitted with this budget, offset by $-0.06 billion in transfers, recissions and liquidations. The table on the following page shows a reconciliation from enactment of the FY 1982 Department of Defense and Military Construction Appropiations Acts to our current FY 1982 revised estimate.

BUDGET TRACK FROM FY 1982 ENACTMENT
TO CURRENT FY 1982 ESTIMATE
(TOA Millions of Dollars)

Military Personnel	FY 1982 Enactment	Program Supplemental	Transfers, Recissions & Liquidations	FY 1982 Revised Estimate
MPA	12,448	105		12,553
RPA	964	9		973
NGPA	1,294	10	26	1,330
Operation & Maintenance				
OMA	15,038	363	-90	15,311
OMAR	658	1		659
OMNG	1,087	2		1,089
NBRP	1			1
Procurement				
ACFT	1,911		25	1,936
MSLS	2,131		24	2,155
WTCV	3,825	126	51	4,002
AMMO	2,382		-79	2,303
OPA	3,722	20	-16	3,726
NG EQ	50			50
Research, Development, Test & Eval	3,610			3,610
Army Stock Fund	176			176
SUBTOTAL, DOD APPN	49,298	636	-60	49,874
Military Construction				
MCA	944	34		978
MCNG	68			68
MCAR	65			65
TOTAL ARMY	50,374	670	-60	50,984

Columns may not add due to rounding.

FY 1982 Pay Raise Supplemental Request

The Army FY 1982 Supplemental Request includes $2.0 billion for military and civilian pay raises. The Pay Supplemental will be submitted in early spring. A breakout by appropriation follows:

FY 1982 PAY SUPPLEMENTAL
($ MILLIONS)

Military Personnel	FY 1982 Revised Estimate	Estimated Pay Supplemental	FY 1982 Revised Program
MPA	12,553	1,477	14,030
RPA	973	105	1,078
NGPA	1,330	162	1,492
Operation & Maintenance			
OMA	15,311	245	15,556
OMAR	659	15	674
OMNG	1,089	21	1,110
NBRP	1		1
Procurement			
ACFT	1,936		1,936
MSLS	2,155		2,155
WTCV	4,002		4,002
AMMO	2,303		2,303
OPA	3,726		3,726
NG EQ	50		50
Research, Development, Test & Eval	3,610		3,610
Army Stock Fund	176		176
SUBTOTAL, DOD APPN	48,874	2,024	51,898
Military Construction			
MCA	978		978
MCNG	68		68
MCAR	65		65
TOTAL ARMY	50,984	2,024	53,008

Columns may not add due to rounding.

The table below provides a three year comparison of Army TOA by appropriation.

ARMY BUDGET
(TOA $ in Millions)

	FY 1981 Actual	FY 1982 Revised Estimate	FY 1983 Request
Military Personnel	14,158	14,856	17,307
MPA	12,117	12,553	14,401
RPA	866	973	1,225
NGPA	1,175	1,330	1,681
Operation & Maintenance	14,419	17,060	18,639
OMA	12,949	15,311	16,828
OMAR	521	659	686
OMNG	948	1,089	1,124
NBRP	1	1	1
Procurement	10,522	14,172	17,830
ACFT	1,203	1,936	2,746
MSLS	1,545	2,155	2,847
WTCV	3,374	4,002	5,031
AMMO	1,559	2,303	2,639
OPA	2,841	3,726	4,567
NG EQ		50	
Research, Development, Test & Eval	3,124	3,610	4,484
Military Construction	986	1,111	1,194
MCA	901	978	1,100
MCAR	43	65	43
NCBG	42	68	51
Army Family Housing			1,062
Stock Fund War Reserve	34	176	221
Army Conventional Ammo Working Capital Fund			1
TOTAL	43,244	50,984	60,737

Columns may not add due to rounding.

INTRODUCTION OF WITNESS

Senator **Stevens**. Secretary Marsh, General Meyer, we welcome you before the committee. We have your prepared statements, and they will be printed in full in the record along with pertinent portions of the more comprehensive statement and budget summary submitted by General Delaune. If you will introduce those who will be testifying today, we would like you to proceed with a short summary of your statements. I hope your presentation will deal with the substantial spending increases proposed in your budget—increases of 40 percent or more from the 1981 level.

I will ask those who will be testifying to give your names to the reporter so we will have those names. We appreciate that very much.

You may proceed with your summary. The budget represents a 40-percent increase from the 1981 budget and, as you know, we have some suggestions in this committee that we freeze spending at the 1981 level. So it would be very interesting, I think if you would address those substantial spending increases for us.

Do you have an opening statement, Senator Stennis?

Senator **Stennis**. No, I don't. I am interested, though, and you suggested already we are having difficulty with the appropriation figures. I hope that there is a strong case for the need for the money, where there is a necessary need, but it will be a long hard year.

I will ask some questions later.

Senator **Rudman**. I have no statement.

Senator **Stevens**. We are pleased to have your statement.

INTRODUCTION OF ASSOCIATES

Secretary **Marsh**. Thank you, Mr. Chairman and members of the subcommittee. It is a pleasure to appear before the committee and discuss the Army's budget for fiscal year 1983.

I have with me General Meyer, the Chief of Staff, and General Delaune, who oversees the Army budget. Both of them will be available along with myself to respond to the committee's questions.

COST AWARENESS ROLE OF ARMY

As I perceive my role, it is one of managing the Army. I also believe one of the critical areas we must address is one that relates to costs. Consequently, I believe that the beginnings of cost savings come from cost awareness. There will continue to be an emphasis in that regard on the part of the Army.

Having said that, I would also advise the committee that recently the Army reported, pursuant to statute, that there were five weapons systems that had exceeded what has been termed the Nunn Amendment or the 25 percent cost increase threshold. They are discussed in my statement. These systems are the Roland, Patriot, Pershing II. Hellfire and the attack helicopter Apache.

These cost overruns emphasize the need for what you pointed out regarding questions that relate to cost and the control of costs. This Army budget requests a total obligation authority of $60.7 billion, and yet I would remind the committee, of the three services, the Army budget is still the smallest portion of the defense budget, about 23½ percent.

When you look at the budget, it must be recognized that it reflects the times in which we live and these are grave times. The threat we face is real. The imbalances that must be addressed between ourselves and the Soviet Union, as the President stated, are very significant.

FREEZE ON DEFENSE BUDGET

You raised a question in your opening remarks in reference to a proposal that we freeze the defense budget. I will simply respond by saying that it is not possible to freeze the world scene, and that the deterioration on the world scene will continue. To try and freeze our defense response would contribute to the further deterioration of that situation.

EMPHASIS ON THE TOTAL FORCE

One of the areas I would like to call to the committee's attention is an increasing emphasis on the Army's Total Force, and by that I refer to the National Guard and to the Reserves. I believe that you will see in the last year, or year and a half, through the efforts of General Meyer and myself and other members of the Army civilian Secretariat and the Army General Staff, that we have and expect to continue to place an increased emphasis on the Ready Reserves.

Let me also remark as to a fundamental Army decision that was made last summer, that does reflect on some of the things you made reference to. Last summer the Army was presented with one of two choices. Either we would continue to expand the size of the force, an expansion that would not be adequately equipped and adequately modernized, or we could hold the force level at a given level and maintain a smaller Army, and seek to improve that Army from the standpoint of modernization and readiness.

The Army chose the latter course, a course that would emphasize readiness and modernization. Readiness is the first priority of the U.S. Army. That readiness is being reflected in manning and equipping the force to address the needs as we perceive them.

There are several very important areas that you will see in this emphasis. One is in manning. I think I would say if you look at the performance of the Army in the past year from the standpoint of manpower, it has been a very successful year. We will be able to respond to questions you might have in that regard.

A second area is modernization. It is here that substantial sums of money will be used. You will see the introduction of new weapon systems, including the M1 and other types of new weapon systems. This area also includes things that relate to communication equipment and other items which are sorely needed. It is this modernization effort that will see a great emphasis in the budget this year.

A third area that we are seeking to place emphasis upon is in the field of organization. I would point out to the committee that there is, and continues to be and has been for some period of time, a shortage in the Individual Ready Reserve or pretrained manpower. That is an area that needs to be addressed. There are certain conditions that have been taken to try to reduce the shortage. We believe over a period of time that we will be successful, but I would point out to you that the shortage does exist.

Very importantly, there is another area in which there is a shortfall. It is in the field of mobilization and relates to the industrial base. There is a need, a very serious need in the event of a national mobilization or emergency, to assess what our mobilization requirements are. We are seeking to do this.

COST DISCIPLINE COMMITTEE

As a final note I would mention to you that a year ago we established a Cost Discipline Committee. It consisted of five individuals with very distinguished careers. Three of them are senior people in industry, one with a background of financial management and one with a background in defense management.

We asked them to look at what the Army was doing in order to see what we were doing right or doing wrong in our acquisition, procurement, and development programs. They did that.

The committee met and they established a time limitation of 90 days to complete their task. They accomplished this and then made recommendations pointing out a number of things that needed to be done. Those recommendations are currently being implemented by the Vice Chief of Staff of the Army and the Under Secretary of the Army.

Over the year ahead we will continue to emphasize the conventional forces. We will also place emphasis on the airborne, the Rangers, and special forces in order that we have a force that can do battle on either conventional or unconventional battlefields.

Finally, I would particularly ask the committee to listen to the comments of the Chief of Staff of the Army who will point out further the grave times in which we live, the roles and mission of the U.S. Army, the threat we face, and his perception of that situation and what needs to be done to address it.

Thank you very much, Mr. Chairman.

PREPARED STATEMENT

Senator STEVENS. All right. Your prepared statement will be inserted in the record at this point.

[The statement of Hon. John O. Marsh, Jr., follows:]

STATEMENT OF HON. JOHN O. MARSH, JR.

Mr. Chairman, members of the subcommittee, it is a pleasure to appear before you to discuss the Army budget request for fiscal year 1983. As I stated before this committee a year ago, I welcome the opportunity to work with you to develop a Total Army capable of successfully preserving our national interests.

My principal responsibility is that of managing the Army. And one of my principal concerns in line with that responsibility is managing costs. Because it is vital that we manage our dollars wisely, we must ensure that the resources that Congress provides are used in the way that gives this Nation the best Army possible. There have been mistakes in the past that relate to our management decisions—and there will undoubtedly be mistakes in the future. But I pledge to you that I will do all I can to ensure that all of us in the Army—uniformed and civilian—Active, Reserve, and Guard—will do our utmost to serve the national interest effectively and efficiently.

In dealing with dollars, we accept the tremendous responsibility that we have as stewards of public funds. I am sure that you are aware that, pursuant to the public law, we have reported to you that five weapons systems have exceeded the 25 percent reporting threshold established. They are: Roland, Patriot, Pershing II, Hellfire, and the Apache attack helicopter.

The fact that there are five such systems confirms the need and the necessity for continued emphasis upon better management of resources in the Department of the Army. As a result of our efforts in the past year, I can report to you that new attitudes toward cost are developing. The collective energy of leaders throughout the Total Army is focusing on the more efficient use of our public resources, and individuals throughout the Army are more cost conscious. We have made much progress, and we well recognize that this area demands continuing attention.

Our fiscal year 1983 total obligational authority request is for $60.7 billion, which represents real growth of about 10.4 percent. However, since the Army family housing appropriation of $1.1 billion is included in our fiscal year 1983 TOA request and was not included in the fiscal year 1982 request, we get a better basis of comparison if we consider real growth without the family housing figure. By removing the $1.1 billion real growth of 8.5 percent results.

I call to the attention of the Committee the international situation discussed in the fiscal year 1983 Army Posture Statement and the grave times in which we live. The general situation has not improved since I stated a year ago that there are matters that, from my perspective, need your immediate and continuing support.

We've made progress in many areas. For example, when I appeared before you last year, I stated my intention to place special emphasis on the Army National Guard and Army Reserve. You will see the results of this emphasis in the current and coming years.

Still, much remains to be done. There are certain priorities to be addressed. These priorities relate to readiness, and to improve readiness we are focusing efforts on several areas: among these are manning, modernizing, and mobilizing. Another area where we are placing emphasis is physical fitness. This program is virtually cost-free, and in addition to benefits to the individual, it demonstrates our commitment to readiness, which begins with individual soldiers and the officers and noncommissioned officers who lead them.

In regard to manning, we have had notable success in recent years, and in light of improvements in pay and compensation, which are included in the $17.3 billion requested in our military personnel accounts, we expect this success to continue. I highlight several areas that merit continued attention: We need to increase our pretrained manpower pool, and we need continued attention to the quality of life issues that will ensure that our soldiers are appropriately compensated for their service and sacrifice.

In the area of modernization, we are entering one of the busiest periods of innovation and change in our peacetime history. Our doctrine is changing, new items of equipment are being introduced, organizations are changing to keep up with new doctrine and equipment, and our facilities continue to become less useful as a result of the combined effects of age and innovation. Funds requested in our fiscal year 1983 budget—$23.7 billion in our investment accounts and $19.7 billion in our operation and maintenance accounts—are essential to the continuation of our modernization efforts and hence, to our state of readiness.

The next area that I highlight is that of mobilization. I mentioned the shortages in our pretrained manpower pool. We also need to improve this Nation's industrial responsiveness, the Army's ability to mobilize efficiently and to deploy rapidly, and the level of prepositioned stocks that must sustain us through the early days of any potential conflict. Our ability to deploy depends on the strategic mobility assets of our sister services, which are topics in their respective budgets.

I spoke earlier about costs, but let me describe a second major achievement of the past year which involves cost control and cost discipline. We have changed policies and procedures that affect costs, and auditable cost savings and cost avoidance figures are increasing. We established a Cost Discipline Committee, which was made up of five individuals who have intimate knowledge of defense contracting. We are implementing several of their recommendations. In another related area, we are vigorously pursuing matters that relate to fraud, waste, and abuse. Our efforts continue in these important areas.

In the coming year, we will strengthen the conventional force capabilities of the United States Army. At the same time, emphasis will be placed on special operations forces, Ranger and airborne units, and on our Special Forces in order to improve capabilities in the area of unconventional warfare. In the conventional units, you will see greater emphasis on light, mobile, deployable, hard-hitting units that rely heavily on communications.

I particularly call to your attention the remarks of General Meyer who will outline the direction our Army is taking and should take in the years ahead. I support him in this endeavor and know you will consider carefully the views he will present.

The tasks that face us are complex. The threats to our national interests are real. But it is with great confidence that we look ahead to meeting any challenge that threatens our vital national interests.

We personally welcome the opportunity, and I speak for the Total Army, to continue to work closely with this subcommittee and the 97th Congress.

CHIEF OF STAFF, U.S. ARMY

STATEMENT OF GEN. EDWARD C. MEYER, CHIEF OF STAFF, U.S. ARMY

NATIONAL REQUIREMENTS FOR ARMY

General MEYER. I just have a brief summary statement, if I might, and I think it is important that as you start to take a look at the U.S. Army, instead of looking at it in the context of the systems and the context of machines and the context of specific line items, that you look at it in the context of why we need an Army and what kind of an Army we need.

Very often you are caught up with the same problem I am where you are forced to look at a tank, or a truck, or aircraft or whatever else it happens to be. I have tried to lay out in my statement a rationale for the kind of Army that I believe this Nation needs in the decade ahead to respond to the challenges, and we have four basic characteristics.

FLEXIBILITY OF FORCES

One is, it has to be flexible. We can't be satisfied with an Army which can only go to Germany and sit in one area over there and not be able to respond elsewhere. We need flexible forces which are able to respond across the full spectrum of warfare, counter terrorism and all the way through the role that the Army has to play in the strategic nuclear times and particularly in their mission in the defensive area.

An area which gets a lot of press today is technological competence. I will not recommend to you weapons systems that are going to be inadequate to the challenge on the battlefield. We have to have weapons systems both today and tomorrow that are at least equal if not better than what the prospective enemy has, and that is, as far as I am concerned, a bottom line as far as what we provide the soldiers.

The force that we have has to be strategically deployable. It doesn't do any good to have an Army and Marine Corps sitting here in the United States that can't go anywhere or do anything.

So we need to do two things. One, we need to improve our strategic mobility through air and sealift, and two, we need to make our own Army forces lighter.

As you know, Mr. Chairman, out near your State, out at Fort Lewis we are experimenting with the 9th Division to develop a high technology light division which can do as many of the things as possible and give us the capability to respond more quickly in a strategically deployable manner.

Finally, we have to have an Army that is tactically and doctrinally sound. We can't develop an Army that is effective for the last war. We have to be looking for an Army effective on the battlefield today and tomorrow. Those are the principles upon which we develop the Army, the principles upon which we developed this budget to support that kind of an Army that can meet those essential characteristics.

I will never be satisfied until we have a perfect Army. Therefore, I would have to tell you that I personally believe that the things that we are doing are going much more slowly than I believe they must. But they are major steps toward a quality Army.

As the Secretary pointed out very clearly we made a conscious decision last summer not to add more divisions and not to add more brigades, and not to add more battalions, but to stay where we were to improve the quality of people and to improve the quality of equipment.

IMPROVED QUALITY OF MANPOWER

I think the great success story with the help of Congress has been turning around the Army manpower situation to the point that the quality of the manpower we have today has improved tremendously and last week we went over 400,000 in our National Guard for the first time in almost 8 years.

We are having success not just with the Active Forces, but also with the Guard and Reserve. With their fiscal year 1983 budget we will end up with a larger Guard and Reserve than we have had since 1961. That is a major step forward in the development of the total force.

The biggest shortfall we have in having the kind of Army that you are charging us with raising and equipping is in equipping that Army. It is equipping the Active, the Guard, and the Reserve, and it is equipping the soldiers with systems that are going to give them a chance to survive on the battlefield and to win. And that is what this budget heads us in the direction of doing.

Thank you, Mr. Chairman.

Senator **Stevens**. Thank you very much.

PREPARED STATEMENTS

General, do you have a statement?

General **Delaune**. I have no oral statement, Mr. Chairman.

[The statements of General Meyer and General Delaune, follow:]

PREPARED STATEMENT OF GEN. EDWARD C. MEYER

CHIEF OF STAFF

UNITED STATES ARMY

Mr. Chairman, members of the subcommittee:

Once again it is my responsibility to assist in your deliberations on the vital issue of national defense.

As the Secretary has made clear, the Department of the Army recognizes the obligations incumbent on it as the custodian of the Nation's land power. In that regard, we believe that an urgent need exists to improve this Nation's land forces so that the Army can be better prepared for its statutory requirement for "prompt and sustained land combat."

Simultaneously, we understand--and the critical nature of this has been manifested throughout the Army--that we must continue to do all that is within our power to ensure that appropriated money is expended wisely.

It is my professional view that what we seek in this budget is rational, that it has direction, and that it is well conceived. It is the minimal requirement which, with funds appropriated with a degree of predictable constancy over the years ahead, will serve the Nation well in what I foresee as a period of increased global lawlessness.

Our national response to the international lawbreaker must include air, land, and sea forces. But I caution that if we are not prepared or disposed to back our words with the physical presence of significant land forces--which by their nature are symbols of a less-than-transient commitment--then we send signals which imply that we are not seriously interested in protecting either our own interests or the welfare of allied communities throughout the world.

Our commitments are broad, linked to interests and agreements that are global in scope. The geographic and climatic conditions we may have to face are diverse, encompassing mountains, jungles, deserts, and plains. The threats that face us include the massive continental forces of the Soviet Union, their well equipped surrogate forces, indigenous para-military forces, and terrorists. The locales of potential conflict are quite distant from our troop bases in most cases. In brief, these facts present a complex problem, one shared by the Army of no other democracy.

The solution lies in attaining the right kind of force: a force that is flexible, technologically competitive, strategically deployable, and tactically sound.

The Army must be flexible, readily tailored to eliminate a single threat or to stop a combination of threats from a broad spectrum of conflict. We need light forces because their capabilities are the best available for many situations. We need heavy forces to confront the Warsaw Pact armies in Central Europe--180 divisions large and 50,000 tanks strong. We also need a force that is light in weight, yet substantial in its capabilities as a result of technological innovation. We are building this force, the high technology light division, at Fort Lewis, Washington. It will not eliminate the need for specifically tailored forces, but it will yield us greater flexibility.

Second, our forces must be technologically competitive, able to defeat today's and tomorrow's opponents. Where it is avoidable, this Nation should not commit soldiers with weapons that will not do the job, as was the case with the bazooka we initially took to Korea. The continued infusion of improved weapons remains an urgent need. The pace of modernization will be governed by considerations of cost and by seeking to avoid a situation where "block obsolescence" could jeopardize our effectiveness. It is critical, therefore, that we sustain modernization at a prudent rate over time, integrating new and highly capable weapons in a high-low mix with the older, less effective equipment.

We will equip our force to gain the best advantage possible as we always have--with priorities assigned according to need and not according to component. For example, early deploying reserve component units are high on our priority lists as are the units that round out our active divisions. Concerns in this area are understandable, but I assure you that the determination of who gets what equipment when is made in accordance with the best interests of the Nation and our ability to go to war and explains why we have not designated a separate account for the purchase of National Guard equipment in our fiscal year 1983 request.

Our modernization programs are also needed to correct longstanding deficiencies in equipment inventories, and our needs with regard to defensive and retaliatory chemical means and theater nuclear weaponry exist as a result of Soviet capabilities in these areas.

The third essential characteristic we seek in our Army is strategic deployability, not just for our light forces, but for the heavy elements as well. We need more and better air and sea mobility assets for our Navy and Air Force. It does the Nation little good to build an Army it cannot deploy, and we appreciate the Congress' recognition of that fact and the assets you have provided our sister services to improve their posture in that regard.

In some areas the prepositioning of equipment is a sound and valid substitute for shortages in mobility assets. But this approach has economic, political, and military limitations. Prepositioning is not a panacea; it provides, however, a partial solution to the strategic mobility problem and attests to our commitment to our allies.

Lastly, the Army we build must be tactically sound. Our efforts to stabilize personnel contribute to tactical soundness, as does our doctrine, which espouses firepower and maneuver in defense as well as attack. Our forces must be well supported, capable of meeting today's and tomorrow's requirements, and able to bridge the gap between the present and future.

In summary, today's Army is a formidable partner in the defense of this Nation's values and interests. It is a well conceived Army, with rational programs and firm direction, but I personally believe we are moving more slowly than necessary and with far less stability in some areas than is desirable. We are working to stabilize our personnel, and we would like to see longer range stability in our procurement programs.

I believe that this budget provides the minimum and essential resources needed to build an Army capable of meeting present and future needs. We have an Army in which you can take pride--in spite of recent criticism of our Army, its people, its programs, and its equipment, criticism often based on either outdated or incorrect information, incomplete understanding, or faulty conclusions. Your committee has been a vital partner in the development of the today's Army. Through our joint efforts, we can have the resources to guarantee a quality Army tomorrow.

PREPARED STATEMENT OF MAJ. GEN. ELTON J. DELAUNE, JR.

DIRECTOR, ARMY BUDGET

OFFICE OF THE COMPTROLLER OF THE ARMY

I. INTRODUCTION

Mr. Chairman and members of the Committee, I appreciate this opportunity to present the Army's portion of the Department of Defense appropriations request. First I would like to make some opening remarks concerning the situation ahead of this nation.

We live in a world of crisis and violence, a troubled world of precarious peace that is generally maintained only by U.S. strength. When U.S. strength appears to weaken, peace is threatened. Without question, U.S. military power and resolve safeguard our uneasy truce.

Within recent times we have seen Russia invade and subjugate Afghanistan and threaten Poland with a similar fate. Terrorists have taken U.S. citizens and military personnel hostage. The extent of the terrorist threat was vividly portrayed by the September 1981 assassination attempt against General Frederick J. Kroesen, Commander-in-Chief, U.S. Army, Europe, by the pre-Christmas kidnapping of Brigadier General James Dozier in Italy, and by the assassination of Lieutenant Colonal Charles Ray in January. In the Middle East turmoil, terror, violence and bloodshed have threatened the Western World's oil supply. Africa, from the Mediterranean to the Cape of Good Hope, is beset by problems resulting from changing governments, shifting alliances, purges, and international conflicts. In Southeast Asia, the boat people are a tragic commentary on conditions there. In our own hemisphere, Cuba serves as a base from which guerrillas and propaganda are directed against the Caribbean and all of the Americas. These events are serious challenges to the central interests of the United States and for the most part, these events are underwritten by the continuing massive growth of Russian military power and by their demonstrated willingness to use that power politically and militarily.

The Soviets now spend more than twice as much of their GNP on defense as we do. In the U.S., the FY 1983 defense budget as a percentage of GNP is 6.3% as compared to 15% (current estimate) in the USSR. The Soviet buildup has proceeded at a rate of 3 to 4 percent annually in real terms over the past 15 years. Hence, they allocate a larger share of their national resources to military spending than we do and our intelligence shows that they will continue to do so for the remainder of the decade. The result is that the Soviets outproduce us in most areas: for example, 2.5 to 1 in tanks. In contrast, U.S. defense cutbacks in the 1970's left our forces unready, unable to carry on a sustained fight, and too often armed with outdated equipment. This FY 1983 budget continues a multi-year program which began with the FY 1981 Supplemental and the FY 1982 Amendment to correct our deficiencies. The six sections of my statement that follow provide a current view of the U.S. Army and our major programs for FY 1983. Throughout we attempt to point out our concerns and efforts to manage well the resources upon which we and the nation depend.

II. BUDGET OVERVIEW

GENERAL

The Army FY 1983 budget is $60.7 billion in Total Obligational Authority (TOA), which requires Budget Authority (BA) of $60.6 billion and Outlays of $53.2 billion. The following table shows the FY 1983 request in current and constant dollars in comparison with FY 1982 and FY 1981.

Department of Army
Budget Comparison
($B)

Current Price	1981	1982	% Increase 81-82	1983	% Increase 82-83
TOA	43.2	51.0	18.1%	60.7	19.0%
BA	43.3	50.7	17.1%	60.6	19.5%
Outlays	37.6	44.1	17.3%	53.2	20.9%
Constant FY 1983 Price*					
TOA	48.5	54.9	12.8%	60.7	10.4%
BA	48.5	54.6	12.2%	60.6	10.6%
Outlays	43.5	48.6	11.7%	53.2	9.5%

* Percent increases include distribution of Department of Defense contingency funds.

Our FY 1982 TOA level consists of the amount appropriated to the Army and a program supplemental request. The FY 1982 TOA appropriation does not include the FY 1982 military and civilian pay raises. A pay supplemental will be submitted in early spring.

The FY 1983 TOA request includes $58.5 billion before the Defense Subcommittee and $2.2 billion before the Military Construction Subcommittee. If we add the Army's share of the Department of Defense contingency for military and civilian pay raises and pending legislation of $1.6 billion, the total Army TOA portion of the Department of Defense request becomes $62.3 billion. In addition, although not shown in the Army portion of the Defense Budget, the Army's share of Defense appropriations for Retired Pay is $5.5 billion; and Claims, $0.1 billion.

Track from FY 1982 Enactment

The Army FY 1982 Budget has a net increase of $0.6 billion since enactment. This net increase includes $0.7 billion for programmatic increases which were submitted with this budget, offset by $-0.06 billion in transfers, recissions and liquidations. The table below shows a reconciliation from enactment of the FY 1982 Department of Defense and Military Construction Appropriations Acts to our current FY 1982 revised estimate.

BUDGET TRACK FROM FY 1982 ENACTMENT
TO CURRENT FY 1982 ESTIMATE
(TOA Millions of Dollars)

Military Personnel	FY 1982 Enactment	Program Supplemental	Transfers, Recissions & Liquidations	FY 1982 Revised Estimate
Military Personnel, Army	12,448	105		12,553
Reserve Personnel, Army	964	9		973
National Guard Personnel, Army	1,294	10	26	1,330
Operation and Maintenance				
Operation and Maintenance, Army	15,038	363	-90	15,311
Operation and Maintenance, Army Reserve	658	1		659
Operation and Maintenance, Army National Guard	1,087	2		1,089
National Board for Promotion of Rifle Practice	1			1
Procurement				
Aircraft Procurement	1,911		25	1,936
Missiles Procurement	2,131		24	2,155
Weapons & Tracked Combat Vehicles Procurement	3,825	126	51	4,002
Ammunition Procurement	2,382		-79	2,303
Other Procurement	3,722	20	-16	3,726
Equipment National Guard	50			50
Research, Development, Test and Evaluation	3,610			3,610
Army Stock Fund	176			176
SUBTOTAL, DOD APPROPRIATION	49,298	636	-60	49,874
Military Construction				
Military Construction, Army	944	34		978
Military Construction, Army National Guard	68			68
Military Construction, Army Reserve	65			65
TOTAL ARMY	50,374	670	-60	50,984

Columns may not add due to rounding.

FY 1982 Pay Raise Supplemental Request

The Army FY 1982 Supplemental Request includes $2.0 billion for military and civilian pay raises. The Pay Supplemental will be submitted in early spring. A breakout by appropriation follows:

FY 1982 PAY SUPPLEMENTAL
($ MILLIONS)

	FY 1982 Revised Estimate	Estimated Pay Supplemental	FY 1982 Revised Program
Military Personnel			
Military Personnel, Army	12,553	1,477	14,030
Reserve Personnel, Army	973	105	1,078
National Guard Personnel, Army	1,330	162	1,492
Operation and Maintenance			
Operation and Maintenance, Army	15,311	245	15,556
Operation and Maintenance, Army Reserve	659	15	674
Operation and Maintenance, Army National Guard	1,089	21	1,110
National Board for Promotion of Rifle Practice	1		1
Procurement			
Aircraft Procurement	1,936		1,936
Missiles Procurement	2,155		2,155
Weapons & Tracked Combat Vehicles Procurement	4,002		4,002
Ammunition Procurement	2,303		2,303
Other Procurement	3,726		3,726
Equipment National Guard	50		50
Research, Development, Test and Evaluation	3,610		3,610
Army Stock Fund	176		176
SUBTOTAL, DOD APPROPRIATION	49,874	2,024	51,898
Military Construction			
Military Construction, Army	978		978
Military Construction, Army National Guard	68		68
Military Construction, Army Reserve	65		65
TOTAL ARMY	50,984	2,024	53,008

Columns may not add due to rounding.

The table below provides a three year comparison of Army TOA by appropriation.

ARMY BUDGET
(TOA $ in millions)

	FY 1981 Actual	FY 1982 Revised Estimate	FY 1983 Request
Military Personnel	14,158	14,856	17,307
Military Personnel, Army	12,117	12,553	14,401
Reserve Personnel, Army	866	973	1,225
National Guard Personnel, Army	1,175	1,330	1,681
Operation and Maintenance	14,419	17,060	18,639
Operation and Maintenance, Army	12,949	15,311	16,828
Operation and Maintenance, Army Reserve	521	659	686
Operation and Maintenance, Army National Guard	948	1,089	1,124
National Board for Promotion of Rifle Practice	1	1	1
Procurement	10,522	14,172	17,830
Aircraft Procurement	1,203	1,936	2,746
Missiles Procurement	1,545	2,155	2,847
Weapons & Tracked Combat Vehicles Procurement	3,374	[illegible]	5,031
Ammunition Procurement	1,559	2,303	2,639
Other Procurement	2,841	3,726	4,567
Equipment, National Guard		50	
Research, Development, Test and Evaluation	3,124	3,610	4,484
Military Construction	986	1,111	1,194
Military Construction, Army	901	978	1,100
Military Construction, Army Reserve	43	65	43
Military Construction, Army National Guard	42	68	51
Army Family Housing			1,062
Stock Fund War Reserve	34	176	221
Army Conventional Ammo Working Capital Fund			1
TOTAL	43,244	50,984	60,737

Columns may not add due to rounding.

Budget Adequacy

The Army's FY 1983 request will enhance the Army's overall posture. However, there are shortcomings in this request. The following chart highlights the major achievements to be accomplished with this request and also highlights the primary areas that we believe are inadequate.

BUDGET ADEQUACY
FISCAL YEAR 1983
THE FY 83 ARMY REQUEST:

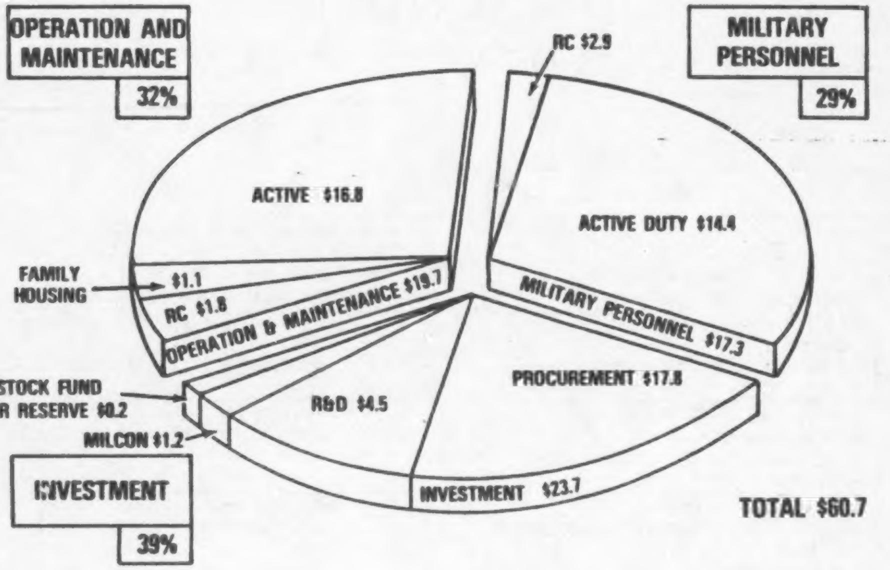
DOES		DOES NOT
• PROJECT AN ACTIVE STRENGTH OF APPROXIMATELY 784,000. • INCREASE RESERVE COMPONENTS. • INCREASE CIVILIAN STRENGTH.	MANNING	• INCREASE ACTIVE END STRENGTH ABOVE THAT OF FY 82. • FULFILL IRR SHORTFALLS. • MEET CIVILIAN ENDSTRENGTH NEEDS
• PROVIDE NEW SYSTEMS AND SIMULATORS. • SUPPORT NATIONAL TRAINING CENTER.	TRAINING	• SIGNIFICANTLY INCREASE TRAINING ABOVE FY 82 LEVELS. • MEET TRAINING BASE OPERATIONS SUPPORT NEEDS.
• IMPROVE RDF STRUCTURE. • PROVIDE PROCUREMENT REAL GROWTH. • CONTINUE PRODUCTION OF MANY NEEDED SYSTEMS.	MODERNIZING	• PROVIDE NEEDED SUPPORT UNITS. • SATISFY EXISTING EQUIPMENT SHORTAGES.
• CONTINUE TO FILL POMCUS. • CONTINUE PROCUREMENT OF WAR RESERVE STOCKS. • REDUCE M+90 TRAINED MANPOWER SHORTAGES.	MOBILIZING, DEPLOYING, AND SUSTAINING	• MEET WAR RESERVE NEEDS. • MEET CONSTRUCTION AND EQUIPMENT NEEDS. • ELIMINATE M+90 MANPOWER SHORTAGES.
• REDUCE BACKLOG OF MAINTENANCE AND REPAIR IN EUROPE. • MODESTLY IMPROVE THE QUALITY OF LIFE OF THE TOTAL ARMY.	ESTEEMING	• REDUCE BACKLOG OF MAINTENANCE AND REPAIR OTHER THAN IN EUROPE. • CORRECT HOUSING SHORTAGES.

Maintaining the Army

The following chart shows the distribution of the Army's FY 1983 Budget Request between Operation and Maintenance, Investment, and Military Personnel.

COST OF MAINTAINING THE ARMY FY 83 TOA REQUEST

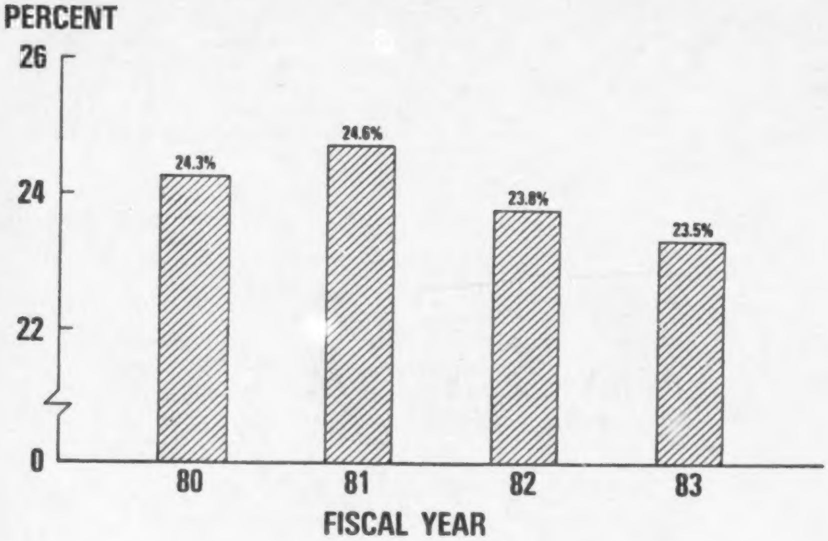
($ IN BILLIONS)



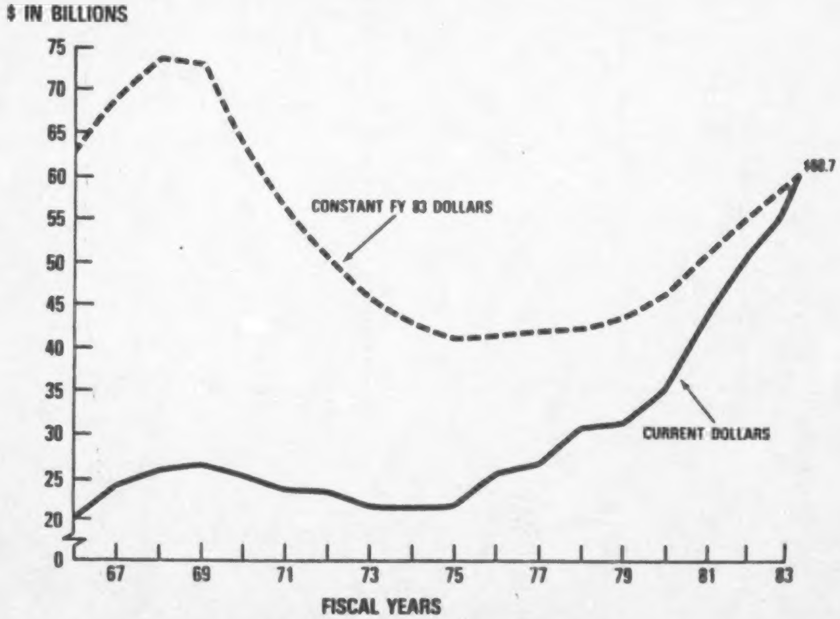
Army TOA Trends

The following two charts show the Army's TOA as a percentage of the Defense Budget and Army Budget trends in current and constant FY 1983 dollars.

ARMY TOA AS A PERCENTAGE OF THE DEFENSE BUDGET



DEPARTMENT OF THE ARMY BUDGET TRENDS

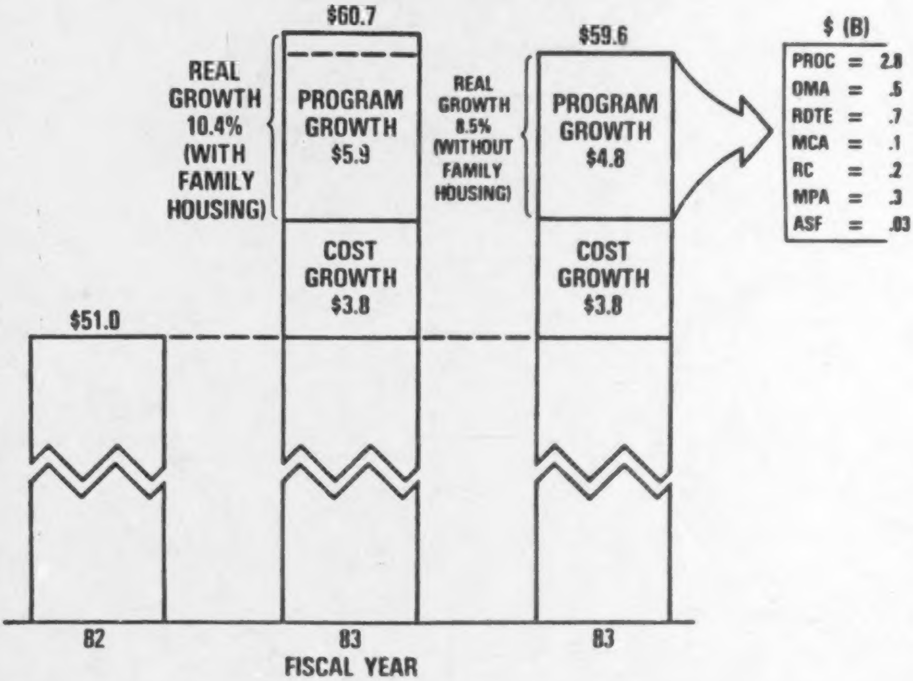


Real Program Growth

A comparison in constant dollars reflects real buying power of the Army budget over time. In FY 1982 the Army projects a real program growth of $6.4 billion or 12.8 %. The FY 1983 budget provides a real program increase of $5.9 billion in TOA or 10.4 %. Included in the FY 1983 real program increase of $5.9 billion is $1.1 billion for Family Housing. Prior to the FY 1983 budget, Family Housing was a Defense appropriation. If the $1.1 billion is removed from the FY 1983 TOA to render a consistent basis for comparison, real program growth of 8.5% results.

Program growth in the FY 1983 budget is primarily in the Procurement accounts. Army growth in FY 1983 focuses primarily on enhancing the readiness of the total force while continuing the modernization program. This request also provides for growth in our research and development efforts, operation and maintenance, reserve components and in military construction to improve the Army's aging and deteriorating physical plant.

ARMY BUDGET GROWTH
(TOA $ IN BILLIONS)



HEARING PROCEDURE

Senator **Stevens**. Well, if it is agreeable, we will follow the principle of 10 minutes for each member and we will start in the order they came into the room. Of course I will yield to Senator Stennis first, but I am going to ask Mr. Dyer to keep a record of the time so that we can have a better allocation of our time in questioning.

IMPACT OF NO REAL GROWTH ON MODERNIZATION

Mr. Secretary, this is an enormous increase on top of an enormous increase last year. It is going to be under severe attack. Some people, as I mentioned, are going to want to hold this budget to no real growth this year and others want to talk about hoiding it to the 1981 level. If we held it to no real growth, we would have to take approximately $5 billion off your budget.

I am not saying we support that, but if we held it to a 10-percent increase or about a 5 percent real growth, it would be somewhere between $2 and $3 billion we would have to take off your budget.

Now, what would be the impact on the Army's modernization effort if either one of those occurred?

Secretary **Marsh**. I think it would have a very significant adverse impact, Senator, that would not be in the interest of the Army and, more especially, would not be in the interest of the United States. I think its impact would be felt in the field of procurement of weapons systems that are vitally needed. There are certain areas in the equipment field where the Soviets not only enjoy a quantitative advantage, but they enjoy a qualitative advantage.

We are not here to advocate quantitative equality, but we do believe that we need parity and we also believe that in weapons systems we need qualitative superiority in certain areas. We think that those opportunities would be lost, and that would severely affect the American soldier.

Senator **Stevens**. I want to ask you a couple of things that are just out of sequence. You have a supplemental request that asks us to repeal the language prohibiting the use of funds to transport weapons and equipment for prepositions in Europe under POMCUS.[1] That is in a supplemental.

You are also budgeting POMCUS funds for 1983. Why do we face the POMCUS issue on the supplemental? Is there some emergency that we don't know about that the Department wants to have a policy decision in the last appropriation bill with regard to that language prohibiting the use of funds to transport weapons and equipment for preposition in Europe, reviewed at this time on the supplemental?

Why didn't it wait for the 1983 bill?

Secretary **Marsh**. Senator, the commitment that we have on POMCUS goes back to the Kennedy administration in 1962 following the Berlin crisis situation. At that time we made an agreement for a 10 and 10 commitment. That is, within 10 days we would have 10 divisions in Europe.

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[1] Prepositioning of materiel configured to unit sets.

In order to meet that commitment we have to preposition stocks for six of those divisions. We also have certain commitments from our allies there. We are making certain efforts to comply with those bills, we are at the same time calling upon our allies for their help and assistance in the way of providing facilities.

We had hoped that we would not have that restriction in the last bill. We believe that it is to our national interest not to have that restriction continue if we are not to be limited in our ability to respond to those commitments.

General **Meyer**. I think it is that simple, that we have committed ourselves to preposition equipment there, and the langurage restricts us from being able to do that.

MASTER RESTATIONING PLAN

Senator **Stevens**. Doesn't this also tie into this so-called MRP plan, master restationing plan, where you are going to forward deploy more troops and that applies to Europe, doesn't it?

Secretary **Marsh**. It does apply to Europe, but it is separate and distinct. Although it could have some relationship to POMCUS, it is separate.

Senator **Stevens**. I understand that, but it is part of the same commitment, isn't it?

Secretary **Marsh**. The master restationing plan primarily moves brigades into a better tactical position. In the event of a mobilization they would currently have difficulty moving into the front line defensive positions.

Senator **Stevens**. How much has been spent on that restationing effort so far?

Secretary **Marsh**. I believe the appropriation on that was $14½ million, if I am not mistaken.

Senator **Stevens**. Is that billions?

Secretary **Marsh**. No, millions, it is $14½ million, and I think it was a result of the congressional report that specified $14½ million.

Senator **Stevens**. What is the total estimated cost of MRP in the time period to be involved?

Secretary **Marsh**. It is substantially greater than the figure I gave you. I think there is $28 million in this bill, but the long-range costs I would have to provide for the record. They are significantly higher than the figures I have mentioned.

Senator **Stevens**. I would like to have them for the record.

[The information follows:]

Master Restationing Plan

The current estimated cost of MRP, presented to representatives of the German government on March 17, 1982, is $1.2 billion, with a planned completion of 1990.

HOST NATION SUPPORT

Senator **Stevens**. Is there any of the total cost to be borne by the host country?

General **Meyer**. Yes, that is what I was going to add. It is one of the reasons that it is difficult to be precise.

Senator **Stevens**. I am talking peacetime now and I know you have a wartime agreement, but we are looking at the peacetime now.

General **Meyer**. We just had a meeting with the Federal Republic of Germany on that a week ago, and that is one of the reasons it is hard to identify specific costs because we are trying to comply with what we believe is right or what we believe is the sense of Congress, and that is to insure that the Germans pick up a large share of that master restationing plan cost.

That is why to give you a specific cost over time would be difficult until those negotiations are completed. They were much more forthcoming in the negotiations this week.

Senator **Stevens**. I assume a lot of that is in the Mil Con bill. For fiscal 1983 can you tell this committee what is in the military construction bill associated with MRP?

Secretary **Marsh**. I think it is $28 million. I would point out, Mr. Chairman, that in the MRP it is necessary to distinguish between the force modernization efforts that we would take from the standpoint of quality of life of the individual soldier, and those things in the master restationing plan which would be a recoupment from Germany.

Senator **Stevens**. I am not going to go into it now, because we are going to have a hearing about NATO forces and the cost of maintaining them, but is any part of this MRP involved in additional troops being sent to Europe?

Secretary **Marsh**. I don't think it does, Senator. It is to move three brigades that are currently west of the Rhine.

[The information follows:]

Master Restationing Plan

The fiscal year 1983 military construction request contains $26.5 million for barracks, a dining facility and two battalion headquarters buildings. These projects combined with the two approved projects in the Fiscal Year 1982 MILCON budget will provide facilities for stationing two combat battalions at Vilseck. These actions reduce overcrowding and permit force modernization initiatives to proceed elsewhere in Germany.

RATE OF INFLATION

Senator **Stevens**. Let me switch to inflation. I understand General Delaune's statement is that the Army uses the 7.7-percent inflation rate in this budget and that the 6.9 percent was the composite number.

I just left a breakfast attended by one of the major banks, I guess the major bank of the country, and they advised me of their conclusions that we are going to have a 6-percent inflation rate in the country for the whole fiscal year.

In any event, how did you establish the Army's inflation rate above the composite? I would think, if anything, in view of the relationship of your budget to other budgets in the Department of Defense that yours would be the lowest rather than the highest in the composite.

How is it the Army's this year is above the 6.9 percent composite inflation rate for the DOD?

General **DELAUNE**. Senator, we receive those numbers, the inflation indices from the Office of the Secretary of Defense, and these were the numbers that we were directed to use in the preparation of the budget.

Senator **STEVENS**. Obviously, if you are using the composite number of 6.9 percent, your real growth is just one whale of a lot more than it appears in this budget because real growth is figured on top of inflation, and if you have inflated your inflation figure it is much larger.

I fought the battle back in the days when inflation was in excess of the rate that was given to the DOD by the Office of Management and Budget, to bring it up to where it was at the time. The corollary of that is that now it is down below and I don't understand why you should be figuring inflation rates much higher than that being experienced in the industrial economy of our country.

Has anyone reexamined the inflation rate in view of the changes since this budget was prepared?

General **DELAUNE**. Yes, sir, we are doing that right now and we are reexamining the inflation rate and examining alternative approaches. We have been working with OSD and as we get the actual inflation rates for the last part of the calendar year 1982, of course these will be taken into consideration.

Senator **STEVENS**. Was there any evidence of adjustment in the ammunition inflation rate?

General **DELAUNE**. No. It looks like the ammunition inflation rate should be slightly higher than it is now.

Senator **STEVENS**. It should be higher or lower?

General **DELAUNE**. It should be higher, sir, the cost of materials in the ammunition area is more than the rate we currently have in the budget, from what we have seen so far. We are working there now with the Office of the Secretary of Defense.

Senator **STEVENS**. I have heard that before and I don't understand. With inflation coming down in the general economy, why is it that in the defense area the witnesses state inflation is going up?

Have you made additional purchases or what is the pressure on your inflation rate in your opinion that is pushing it up?

General **DELAUNE**. The ones that are higher in the budget are limited to aircraft, missiles and weapons on tracked vehicles. That is due to the cost of materials, because of exotic materials used in aircraft and missiles. We are looking in the ammunition area to see that we do have the proper inflation.

REDUCTION OF THE FORCE

Senator **STEVENS**. Mr. Secretary, my last question is: There has been a suggestion that if we were to have any budget cuts we should apply the budget cuts to force reduction rather than to readiness and modernization initiatives.

Do you hold to that view?

Secretary **MARSH**. Senator, I can understand the background and the nature of the question. We believe that the presentation we have made to you represents the minimum necessary force structure for the Army because last summer we made the decision to opt for a smaller Army that would be modernized as opposed to continuing to increase the force over a period of time.

Senator **Stevens**. I don't think that answers my question. Is this budget supposed to reflect a force reduction?

Secretary **Marsh**. The budget reflects an emphasis on readiness and a holding of the force at its current authorized strength of 783,800.

Senator **Stevens**. The assumption is from some direction there is going to be a budget cut here, and in your budget. I am informed that there are substantial voices saying, if there is going to be any budget cuts applied to the Army they should be in force reduction rather than in any way to affect readiness or modernization.

Now, is that your view?

Secretary **Marsh**. Well, I go back to my original statement. I recognize that the initiatives rest with the Congress in addressing our budget. I would urge that that reduction not occur. However, I would also emphasize that we continue to place an emphasis on readiness, and I think readiness is a critical area of need and reflects the current situation.

Senator **Stevens**. So you would subscribe to that advice, if there has to be any reduction it should be force reduction?

Secretary **Marsh**. I would not subscribe under any circumstances to a reduction.

Senator **Stevens**. I understand that, and no one is asking you to advocate it.

Secretary **Marsh**. I am saying the emphasis should be on readiness, sir.

Senator **Stevens**. Well, that is a hard question. I think there is a tremendous job these people are carrying on for these men in uniform. The problem gets greater and greater and the money problem is important. You are right up against the wall there, Mr. Secretary.

It is the first time in a long time that I remember where there is an alarm among those that ordinarily strongly support the military, that is for money. There is an alarm to some degree, and it is getting out of proportion. It is too much, creating a backfire within the next few years against the military money.

I can understand these enormous increases in your weapons cost, but I can't really understand it. I will have to leave that to you, gentlemen. It seems to me that your management is better than it has been, and I am not making any individual comparison. I don't know, but I will generally support the budget figure here in the military generally, and I would like to see it go up.

I think the main thing you are up against is nothing is being done to improve it and that is the manpower sources. I think you will have to go back sometime to the Selective Service Act and have them compete out here and get men of the caliber and talents you need. We will just have to have that. I think that is the greatest deteriorating influence you could have, too. That is throughout the world. We would rather have the Selective Service Act and we would spend a lot of money. It is our strong argument to our adversaries, the fact that we were having a Selective Service Act.

I think it is a political question and not fully explained to the people. You folks have to take whatever system you get out of the Congress. I think that is the secret.

On the money cost, of course, I wish you gentlemen would go on talking among yourselves. I might point out that I think you made the statement in the role you are having and I am glad you have another year at least to go.

I will have some special questions, but I will pass now. There are others who are here.

Thank you, There is plenty of time for questions, Senator Rudman.

TANK PROCUREMENT PROGRAM

Senator **RUDMAN**. Secretary Marsh and General Meyer, I want to talk to you just very briefly about your tank procurement program. Recent CBO estimates, which I believe you are probably familiar with, now indicate that in addition to the costs which we know are high on the M1 for a variety of reasons, but the support costs on supporting these vehicles are running about 55 percent higher than the other battalions presently we have to apply.

Similarly with your fighting vehicles, your support costs are much higher. I have had some discussions with the various people in the Army about the likelihood of having a higher rate of conversion of your M60A3's, on the theory that you can buy about 10 of those conversions or maybe even 12 for every M1 you can deploy, and you can deploy them faster, at a much more rapid rate.

And No. 3, that the mix through the 1980's of a high number of M60A1's even though the full production schedule continuing on the M1 might give you a much better force structure.

I have suggested that maybe you ought to take a look at this year's budget and in the next several years use some of this money for a faster conversion rate of the M60A3 and I want to know whether that is under consideration?

Secretary **MARSH**. Senator, let me make a comment in reference to what you said and then ask General Meyer, who I think is far more qualified than I, to speak to that subject.

One, I would say the M60 is a very fine tank and it will be in the U.S. inventory for a number of years, certainly through the rest of this century. There will also be a continuation of our conversion efforts. However, the M60 does lack some of the qualities and the capabilities of the M1. It lacks the speed, it lacks the powerplant and it lacks the armor, which is a question of survivability.

Between the two vehicles, I think you would have to say that there is a greater capability in the M1.

But having said that, and recognizing the point you make, which is a very good one, I am going to ask General Meyer to comment on that.

Senator **RUDMAN**. Before you do, let me say there is no argument on what you just said. The argument is simply if you take a baseline of manufacturing capabilities, even if they double the rate for the next 5 years and deploy the M1's at that rate, versus deploying the M60A3 at a much faster rate and lower cost you would at least have a much more balanced force structure in Europe than if you didn't do that.

I want to know whether or not you are intending to do it?

General MEYER. The factor we have to look at, as you know, is that at the present time the tanks that you are talking about converting are the tanks that are in the hands of troops in Europe today.

The faster we can convert M60A3's, the better off we are, because that provides us good tanks out in the 1990's. The determinate is what does it do to the force in being at the present time. We will have to take tanks away from the force in being. I will lay it out for you, for the record, exactly how much faster we can do that. In looking at it over time it ends up, what do you have to take away from soldiers? If they go to war tomorrow, you don't want them without tanks.

So we want to make sure we are protecting the field during the next 3 or 4 years. That is really the way it is. I think that is the part of the equation people don't talk about. I believe we can lay that out for you.

Senator RUDMAN. I would like to see that and see what the inventory is here in this country in terms of the number of changes.

[The information follows:]

TANK CONVERSIONS

Your earlier comment that we fund 10 or maybe even 12 M60A3 conversions for the price of one M1 tank overstates the cost relationship between the M60A3 and the M1. With M60A3 conversion kits costing a little more than $350,000 and application costs running approximately $150,000, we can convert about 3.5 M60A3's for the price of an M1 (fiscal year 1983 unit hardware cost $1.8M).

In response to your specific requirement, the rate of M60A3 conversion can be increased to 720–770 per year. This accelerated conversion rate would require additional annual funding of approximately $131M (fiscal year 1983 Procurement dollars) and $49M (fiscal year 1983 OMA dollars for transportation and kit application in fiscal year 1984). Given the current programed M1 production rate and an accelerated return of those prepositioned war reserve materiel stocks (PWRMS) which would eventually exceed our requirements in Europe, we could accelerate the rate of M60A3 conversions and increase M60A1 to M60A3 battalion changeovers from the currently programed four to six or eight per year without taking tanks away from our units. At this point, the risk we would incur to accommodate this accelerated conversion rate appears to strike a tolerable balance between our modernization and our readiness requirements.

M48 TANK REVISIONS

General MEYER. We are still in the process of taking the old M48 tank and converting that and turning it over to the units, so despite the fact that the M1 is coming in, we will have the M48A5 and others really into the 1990's.

Senator RUDMAN. I want to say in connection with the whole tank program that I believe that someone in the Army ought to take a very serious look at the end numbers of M1's currently being proposed for production, particularly in the light of the fact that by your own programs and your product improvement program you are now looking at a modification of the M1 for the out years because it doesn't meet the threat that we hoped it would meet, obviously being in the pipeline for about 18 years now. So I would like to see some myself.

On the same general question, but from a different point of view, Mr. Secretary, the management task force that you put together (which you talked about earlier in your statement which completed its report), what did it have to say in particular about the Army's procurement practices in terms of competition?

Secretary MARSH. The Cost Discipline Committee recommended that we should maintain greater competition throughout the acquisition cycle. We want to keep competition there as long as we possibly can rather than going to sole source.

Senator RUDMAN. Do you believe the Army is following that, and do you believe they are following it where it is prudent and where it is possible?

Secretary MARSH. Senator, I think there is an emphasis on trying to do that. There are a number of forces that impact on sole source frequently, but I think this report which I made, and you may have a copy of this, will put the Army—certainly it is recommended to go—in the competitive direction.

This incidentally is currently being implemented and should be fully implemented by the first of June.

General MEYER. I would just underscore that, and the Secretary is being nice. I don't think we have done enough competitive bidding and we have to do more of it. That is what the report says. We are trying to drive that thought down now to the entire procurement community so that they understand the importance of competitive bidding, because of what that does to the cost per unit.

Senator RUDMAN. The reason I asked the question is I had a very disturbing report in the last 2 days that where there had been a plan, and still on paper there is, to second source on a competitive basis the fire control system for the M1 and it is for the M60A3, that because of a number of factors there is now some question as to whether or not that will happen.

I would like to talk to General Keith, I believe, because I have some figures that indicate a potential saving of close to half a million dollars if the Army will allow it to be competitive.

If the savings aren't there obviously you won't do it, but I am led to believe that there is now a movement afoot due to some industrial capacity argument that this is going to continue sole source.

If it does, in the light of the rather catastrophic cost growth of the M1 program, it seems to me that that would be a very important thing for the Army to do. So I would like a chance to discuss that with you, probably at some subsequent date.

Secretary MARSH. I will be happy to. I think I know something of the background and maybe it would be helpful to give you some additional information.

[The information follows:]

M1 TANK SECOND SOURCING

M1 second sourcing makes sense and will directly or indirectly bring efficiencies to the program. Second sources for critical components will increase the probability that those items will be available to support increased tank production. Second sourcing should also return some long term economic benefits.

A decision on whether or not to proceed with plans to second source fire control components will be made by May 1st, after a multi-year contract proposal from Hughes is analyzed. The procurement plan for engine second source is being developed now; the RFP is scheduled for release about 1 June.

The fiscal year 1983 budget contains $80.6 million to begin second source fire control development. Fiscal year 1983 funding for engine second source development is $25.4 million.

LIGHT ANTITANK WEAPON

Senator **Rudman**. If I may make a comment, Mr. Chairman, to General Meyer. This last year this subcommittee became very involved in the whole fight over the procurement program and we had a meeting with General Skibbie last week. I want to say that the Army at this hearing, that I think you have followed our mandate rather specifically.

I am very encouraged by what I see and I would be willing to say here, based upon what General Skibbie indicated, that the Army will have the best light antitank weapon available for the soldiers in the field at the lowest cost when this procurement finally gets underway sometime next year.

We complain a great deal at these hearings and I want to tell you that I think you had followed that instruction specifically and I was very pleased. The chief of our staff was there for part of the meeting and I think we are headed in the right direction.

Secretary **Marsh**. Thank you, Senator.

Senator **Stevens**. Senator Kasten.

MEDIA COVERAGE ON THE M1 TANK AND BRADLEY FIGHTING VEHICLE

Senator **Kasten**. Thank you, Mr. Chairman.

Mr. Secretary, the Pentagon hasn't been getting very good press lately, especially on some of the Army's new weapons systems. A recent Wall Street Journal piece on the Bradley Infantry Fighting Vehicle, for instance, was less than encouraging about our development and procurement cycle. I'm sure that some of this reporting is distorted. But the public, especially my constituents in Wisconsin, are being left with the impress that we just can't do anything right. Frankly, some of us in Congress are getting the same impression. We're being left with the feeling that the Administration has to start applying the same budgetary discipline to the Defense Department that it applies to social and domestic spending.

I understand that the Army recently issued some point papers rebutting much of the media coverage on the M1 tank and the Bradley. Is that correct?

Secretary **Marsh**. Yes, Senator. There are substantial amounts of material that address a number of the questions raised about the M1. You made your earlier comment about the need for cost control and let me mention something that you might find helpful and reassuring.

At the time that this administration took over in the Pentagon, within the Department of the Army a decision was made that the number two position of the Department of the Army, the Under Secretary, would be an individual who had a distinguished career in the field of defense procurement, management, development, and the whole acquisition process. That has been done. The individual selected, Mr. Ambrose, does come from a very broad defense background.

One of the first things that he did was to get up front and flush out a lot of costs that had never been addressed in order to get a realistic assessment of what these weapons systems are costing. This provides a better base from which to negotiate.

Some of the costs recently disclosed are the result of that effort. This was done in order to try and get a better handle on managing these costs.

APACHE ATTACK HELICOPTER

Senator KASTEN. Was the AH64 included in this process?

What is the current status of the negotiation with Hughes on that helicopter?

Secretary MARSH. I talked to the person in the Department of the Army directing those operations. At this stage they are between counteroffers. He does not feel that there has been a counteroffer yet that is acceptable to the Army from the standpoint of the concerns that you have expressed.

I would preface this by saying that there is a very great and real need for an attack helicopter. However, at this point in time there has not been a meeting of minds between the contemplated manufacturer and the Department of the Army. I suspect that this will probably be resolved fairly shortly, perhaps within the next several days.

COST OF THE M1 TANK

Senator KASTEN. What is the current unit cost of the M1 tank?

Secretary MARSH. Senator, the description of the defense costs include three different sets of costs.

Senator KASTEN. I'd like to get some idea of comparative costs. For instance, how much does our M60 cost? And how much does the German Leopard II cost?

I'm also interested in production rates? What are our plans for the M1, and how do they compare with production rates for the comparable Soviet tanks?

Secretary MARSH. I would say the current M1 costs are comparable to and probably slightly less than the German Leo 2. The relationships to Soviet costs I would have to give you in closed session.

The M1, as far as the Army is concerned, is not priced much beyond other Army vehicles of its kind. We can give you precise costs and estimates of the Soviet systems for the record.

[The information follows:]

COMPARATIVE COSTS OF TANKS

The hardware unit costs for the tanks in (fiscal year 1983 dollars in millions) requested are:

M60A3	1.3
M1	1.8

[Deleted.]

We do not have an unclassified hardware unit cost for the Leo 2. We can, however, compare program acquisition costs by using a Leo 2 figure from the Leo 2/XM1 comparisons and escalating it to fiscal year 1983 dollars.

M1	2.4
Leo 2	2.5

ARMORED COMBAT EARTHMOVER

Senator **Kasten**. What about the ACE that will move with the M1? That's an additional program cost, isn't it?

Secretary **Marsh**. You might want to address the ACE, or armored combat earthmover. Its principal purpose is not to dig in a tank. It is for creating roadblocks and doing bulldozing, and if it is necessary to assist an armored unit in digging in. But that is not its principal purpose.

General **Meyer**. In all armies of the world, there are engineer vehicles, and I think the Secretary outlined it very well.

I am responsible for the way that that showed up in the press article, and it was a series of questions that came out in the House Appropriations Committee last year. It was selectively reported, and it only addressed the part that related to the tank. It didn't relate to all of the other things that the Secretary of the Army indicated that that engineer vehicle was required to do.

There is a need for an engineer vehicle because mobility and counter mobility is how you maximize the capability of your forces on the battlefield, by preventing the enemy from moving or making it easier for you to move.

If you want wars of maneuver and you want the opportunity to be able to do the kind of things that we have to do on the battlefield, you need to clear that battlefield of rubble and debris, and so it takes an engineer vehicle.

My only point is, it is unfair to charge that to us and the M1. That is like charging the costs of a carrier to the costs of an M1 because you have to protect the M1 as it transits the Atlantic Ocean.

Senator **Kasten**. That is just the kind of information you have to make available to the public. Let me make sure I understand you. Is it accurate to say that the M60 can operate relatively easily without one of those earthmoving vehicles, but that the M1 needs the ACE to operate effectively?

General **Meyer**. That is comparing apples and oranges and any other kind of fruit you want to throw into the fruit salad. They aren't even facts.

Secretary **Marsh**. You asked for certain costs of the M1. I am going to furnish you those three costs. If I gave you rollaway costs, the rollaway cost would be less than the cost usually cited for the M1 tank.

Senator **Kasten**. I've heard a figure of $2.6 million per tank.

Secretary **Marsh**. That figure relates to the total life cycle costs and it includes all research and development costs and all procurement costs and support costs to acquire the entire fleet of about 7,000 tanks. But a rollaway cost would probably be a little less than $2 million, if you were to buy one tank off the line right now.

Senator **Kasten**. Would you provide for the record both of those costs?

Secretary **Marsh**. There are three costs, but the rollaway cost does not reflect the full total cost.

[The information follows:]

UNIT COSTS OF THE M1 TANK

The three unit costs referred to for the M1 tank are the Hardware Unit Cost, Rollaway Unit Cost, and Program Acquisition Unit Cost. The costs shown are average costs over the entire 7058 tanks in fiscal year 1983 constant dollars.

Unit Hardware Cost=$1.8 million:

Includes an M1 tank with machine guns, radios, tools, and basic issue items to allow the crew to maintain the vehicle.

Unit Rollaway Cost=$1.9 million:

Includes the unit hardware cost plus initial production tooling and engineering, and government project management costs.

Unit Program Acquisition Cost=$2.4 million:

Includes unit rollaway costs plus initial spares; research, development, and testing costs; M1 peculiar training equipment, test sets, tools, and support equipment; production base support; and integrated logistics support system costs.

BRADLEY FIGHTING VEHICLE

Senator **KASTEN**. The Bradley Infantry Fighting Vehicle program was severely criticized in the recent Wall Street Journal article I referred to earlier. Now what I don't understand is how simple data, facts about the vehicle that should not be in dispute, become a point of contention between the Pentagon and the press. For instance, press reports say that the Bradley carries six infantrymen while the Army says it carries nine. Which figure is correct? And how do such discrepancies come about?

Secretary **MARSH**. It carries nine persons, including the operators of the vehicle. Six of these individuals are the support infantrymen.

General Meyer wants to speak to that.

General **MEYER**. That is exactly the issue, that it carries nine. The reporters elected to merely talk about the six who get out of the infantry fighting vehicle and leave the other three to do the firing and directing the vehicle.

Senator **KASTEN**. It was just being distorted by the reporter?

General **MEYER**. It is a way to report it that highlights that particular thing.

Senator **KASTEN**. How long did it take to develop that vehicle? When did the program begin?

General **MEYER**. That is, the infantry fighting vehicle is at least 11 to 12 years.

Senator **KASTEN**. Were the delays caused by funding problems or cutbacks by Congress? Or were they caused by design changes or other factors?

General **MEYER**. It is a combination of both. If there is any fault it is on the part of the Army in getting exactly what we wanted, and it has been of some concern on the part of Congress whether that is what we really ought to have. As a result of that the things got stretched out over a time, but I can't point my finger at any one person.

INTERSERVICE RIVALRY

Senator **KASTEN**. We've heard a good deal about inter-service rivalries from General Jones lately. I recall a time several years ago when Admiral Zumwalt spoke out on the same subject.

Reading the Wall Street Journal piece, I got the impression that there was the same kind of counterproductive rivalries going on in the development process of the Bradley. There seemed to be a history of conflict over precisely what capabilities the vehicle should have and what function it should perform.

I notice smiles from all three of you, so this is obviously a topic of some conversation.

Do we have a real problem with inter-service rivalries and with competition between various branches within a particular service? Are they creating additional problems for our whole development and procurement cycles? And if we do have a problem with these rivalries, how can we correct it?

General **Meyer**. First, I think in the broader context, it is unrealistic to believe that service chiefs come to you and explain to you what their shortfalls are and where they believe there are legitimate shortfalls.

I am coming to you and telling you that your Army is not equipped to the degree you ought to feel confident of going back to the folks in Wisconsin and saying that their young men and women are given equipment that is equal to the task.

So it is not logical for me to go then into JCS when there is a restriction on resources and to not push that need in the JCS. So I believe as you look at Joint Forces that that clearly happens.

I agree with General Jones completely on that, and I don't know how you in the current system will get away from that relationship.

I have some ideas for changes, but it is not for this session. Within the Army the way we have attempted to overcome that particular problem is that we have a training document plan and, I try to balance the services, balance the various branches there, so that within that branch there are light infantry and heavy infantrymen, and aviators and everyone else. So that as we develop the doctrine it is developed taking into account all of those various people and their ideas and concepts. Then we have to sit down and attempt to focus on the needs.

Very candidly, until the past 2 years we have been directed not internally by the Army, but externally by Defense to develop a very, very heavy Force which was responsive only to the demands of Central Europe. We have been fighting that, due to what Secretary Marsh said.

He wanted a lighter Force and to have the capability of responding more flexibly across the full spectrum of requirements. So I would say that internally that is what we try to do.

The reason I started to smile is because I am an infantryman, and I am proud of it and that is a rationale for having an infantry fighting vehicle, but an infantry fighting vehicle is an essential element of the mechanized Army.

Senator **Kasten**. I appreciate your candor and honesty. But I can't say that I feel very comfortable with your sentiments about the need to do battle for your particular service branch.

I think we finally have a consensus on the need for an increased defense effort. And I believe that it is the responsibility of all service branch representatives to work together in determining the most effective way of correcting the deficiencies we see in our military capabilities.

Perhaps I misunderstood you, but I don't think we can afford service parochialism any longer.

General **MEYER**. I think you did. All I am saying is that the Army is and must be the most joint of all services. I say that totally parochially, but I say it because it is essential.

The Army can't go to war without the Navy and the Air Force to move it, and we can't go to the war without the Air Force providing air support. The Navy can go to sea without needing that support, and the Air Force can fly out without it.

So I would just assure you in this that the Army probably looks more closely at that and is supportive as you will read in my testimony on other service systems that contribute to the total. But I will merely tell you that when you are talking about dollars and resources and everybody is short, it is difficult to do the kind of prioritization that we are talking about, and we don't have a mechanism for doing that.

Senator **KASTEN**. Thank you.

Senator **ANDREWS**. General, don't apologize for saying that. You know the rest of the service just exists to help the Army out and buy the real estate which confirms the victory.

I am glad to have you here, Mr. Secretary. You and I go back a long way. We went to Congress a long time ago. I think you are one of the best choices the President has made.

MULTIYEAR CONTRACTING

I have some questions, though, that bother me because I keep hearing that you are concerned about our readiness to fight, you are concerned about ammunition, and you are concerned about spare parts and you are concerned about these supplies, ordnance has been drawn down.

In looking over the budget I find that the Department of Defense is requesting reprograming authority to move money out of the ammunition procurement account, for instance, the UH 60-A, the Black Hawk helicopter and to give you a multiyear procurement contract.

I can understand why you need multiyear procurement contracts where they save money, but given the rhetoric we have gotten from your shop it is surprising to me that you are transferring money out of the ammunition procurement account to move in this category.

Secretary **MARSH**. Let me mention the rationale behind that, Senator, and hope that you would see your way clear to support it.

One of the policies that has been implemented by the Secretary of Defense, which is strongly supported by the Army, is to move to a program of multiyear contracting because we see that with multiyear contracting that over a period of time we can effect some very substantial savings.

One of the candidates that was identified where this type of savings could occur in most significant numbers was the Black Hawk.

Senator **ANDREWS**. I don't fault any of that.

Secretary **MARSH**. When we bring the Black Hawk into the inventory, its abilities are such that you will make up for some of the other shortfalls that you might have in your combat arms. So if we can go into a program of multiyear contracting on the Black Hawk, we can really save money now that can later be used for ammunition and other purposes.

We can furnish you some statistics for the record as to what those savings would be.

Senator **Andrews**. I wish you would. My concern is not to the multiyear contract and in fact I said that was a good thing and it makes sense, but my concern is that you take out of an ammunition account which we have been told time after time after time is the place that the Army has been raided year after year and now all of a sudden you are doing your own damn raiding and moving in an area that you think is important, and I think the bulk of the committee thinks it is important, but you are taking it out of the wrong funds.

I would rather have you come up and ask for some up-front money instead of coming through the back door really and in effect taking it out of the very areas that you said time and time again is short.

Now, have we gotten more ammunition on board than we need and do we have more spare parts than we need? Every time I think about it, they say they can only use so many rounds of ammunition because they don't have it and the stockpiles we have in forward positions is short, and spare parts inventory is short.

Your statement in regard to multiyear contracting is correct, but taking it away from ammunition is what bothers me.

Secretary **Marsh**. I appreciate your concern, sir, and the ammunition accounts are still areas of critical need. The Black Hawk was simply an overriding priority and that's what caused us to do that, Senator.

Senator **Andrews**. Well, if you can provide any further information for the record I would appreciate it.

[The information follows:]

Reprograming Sources

We looked at the total priorities of the Army and reviewed all programs for possible reprograming sources. The lines identified for give-up are programs that have slipped or that we found a legitimate reason for decrementing at this time. For example, an earlier decision had been made to defer nuclear weapons stockpile improvement efforts which no longer require funding in fiscal year 1982. Funds obtained from the Bushmaster program take into consideration production backlogs and current production rates. The program as adjusted by this action will still maintain the producers at an economical rate of production.

PROCUREMENT OF CAMOUFLAGE SETS

You have also asked for transmission of $8 million from the camouflaging screening program to a training program. Most of these camouflaging screens, we saw them when we were down there, and people say they work great. All of a sudden you are transferring $8 million out of the procurement of camouflaging screens, a lot of which are made in minority plants on an Indian reservation in my State, and I have very parochial interest. But let me add, when we are worrying about impact, that camouflage manufacturing plant is providing over 300 jobs for the 2,500 Indian families in the area and they are achieving financial success and being free from Government handouts.

The Government, through its welfare programs, would have to support them if you didn't give them the pride in having a job in a plant that is doing a good job for them.

Secretary **Marsh**. I am going to ask General Delaune to give you a statement on that.

General **Delaune**. We made the audit for the fiscal 1981 fund, and we suddenly found we went into 1982 planned procurement. We are actually using all of the capacity and all of the nets that we can buy, which we are on contract to buy, and we plan to do that again in 1982 and 1983.

Senator **Andrews**. That is where your information differs from my information. My information is that the plant up there on the reservation has the capability to turn out more nets and the information we get from talking to your people out in the field is that more nets are needed.

You just told me that you don't have the capacity to make more and we are up to capacity. That is where the argument falls apart.

General **Delaune**. The requirements far exceed the capacity according to the information I have, and I show that in fiscal year 1982 that they can produce 60,000 camouflage sets.

Senator **Andrews**. What is the Army's projected buy over the next, say 5 years?

General **Delaune**. The Army and the Marines will purchase the total capacity of production, as I have it right here right now, and I will be happy to go back and review the figures and furnish anything else you want.

Senator **Andrews**. If you would provide that for the record it would be most helpful, because we aren't able to find out just what the Army's requirements are and it makes a considerable difference out there. If you are getting a story that they don't have the capacity up there, they do, and given the type of employment they have up there it is extremely important and from a number of other standpoints in the overall budget.

If you will provide that information for the record and what your anticipated needs are and your estimated capacity.

General **Delaune**. I will provide the requirements and the estimated production.

[The information follows:]

PROCUREMENT OF CAMOUFLAGE NETS

Contracts for camouflage nets with 100 percent options were awarded Sep/Oct 1981 for delivery of 60,000 systems during fiscal years 1982-83. Deliveries commence on completion of fiscal year 1981 contract with no break in production.

Total requirements exceed 587,000 systems. Presently all services are reviewing their requirements and will provide data to the Army.

Current contracted producers, in the past, have indicated a maximum production capability of 60,000 systems per year.

DA has directed HQ DARCOM to develop an acquisition plan by the end of 3rd Qtr fiscal year 1982 to, as a minimum, include the following:

(1) A competitive acquisition strategy.

(2) Indication of DoD total requirements and long-range plans to satisfy these requirements.

(3) Consideration of multi-year procurement.

(4) Assessment of current and out-year (estimated) production capability.

BALLISTIC MISSILE DEFENSE

Senator **Andrews**. In the talk about the MX missile, this is one of the things that has been bugging me, putting a missile with 10 warheads down in a hole, and giving the Russians in effect 3 times as much suspect for the same amount of take-out material, that isn't a very darn good bargain. If we go to the BMD will the Army handle that or the Air Force handle that?

Secretary **Marsh**. I understand that will continue to be an Army program. The Army has done substantial work in this area for a period of years.

General **Meyer**. We are focusing principally on the low altitude approach to it, and we need in the out years to look at an exoatmospheric capability. At the present time we are emphasizing plans for the defense of MX because it provides, in my judgment, the ability to be able to make a major change in the strategic nuclear equation. BMD gives us an opportunity to insure survivable offensive warheads. I also believe BMD will give us an opportunity to be able to drive down the total number or total amount of strategic offensive systems.

Senator **Andrews**. It is your feeling based on the information you now have at hand that the BMD—for a while it was the ABM, every fellow who comes in has to change the alphabet.

Does that make it work better?

General **Meyer**. The program name has been that way for about 6 years.

Senator **Andrews**. In this new BMD setup, could you do that without violating the SALT Treaty?

General **Meyer**. You mean without violating the ABM Treaty?

Senator **Andrews**. The ABM is a part of SALT?

General **Meyer**. It was a separate treaty. It is in the same environment. [Deleted.]

CIVILIAN TECHNICIAN PROGRAM

Senator **Andrews**. In 1978 the House Appropriations Committee recommended the DOD conduct a test of the permeability of the Navy on the high personnel and active duty status by filling some of their vacant civilian technician positions, and all new positions added to the structure were full-time active duty military personnel. Has this program succeeded?

Secretary **Marsh**. We think we have made very significant strides in both the Active Army, the Army Reserve and the Army National Guard, using the full-time management approach.

General Meyer may want to speak to that, but we feel very encouraged with the progress.

Senator **Andrews**. Will it continue past the March 31 cutoff date?

General **Meyer**. Yes, and we feel very strongly about it because it has improved the readiness of our Guard, particularly of our Guard and Army Reserve units. Because we have full-time technicians the individual Guard members and the reservists are then able to rely upon someone who is there full time to do things during the week, in the training area and maintenance area, and the administrative area, so that on weekends they are going to get better training.

We think that is a high payoff type of thing.

Senator **Andrews**. If you can provide any more information I would appreciate it.

[The information follows:]

Civilian Technicians in USAR and ARNG

The major functions and benefits of the full-time support force are as stated above.

SCHEDULE FOR RENOVATING OFFICES

I have one final question. A frequent criticism that we get from people near military bases is that every time we move a new commander on board or subcommander or whatever, you recarpet and you repaint, and you refit the offices.

Now, it sure stirs up the mail, probably more mail than the strategic weapons system or any other type of procurement.

Is this what you do or do you have a definitive period at which point you go in and you refit these offices for the high-ranking officers on board an air base or Army post?

Secretary **Marsh**. I would have to defer to one of the military people.

General **Meyer**. They are based on a regular time schedule that they are supposed to be brought up to speed. I have not had that very candid complaint brought to me, but I will make sure that all of the folks down the line—I really mean it, I have not.

Senator **Andrews**. What time schedule are they on?

General **Meyer**. It varies, it is normally 6 years for defense. It depends on what it is, just as they do here in this building, they have a regular schedule to do it.

Senator **Andrews**. If you can provide that schedule for me?

General **Meyer**. I will do more than that.

Senator **Andrews**. We are hearing that every time you move a new guy on board you paint and recarpet and fix up and then they see the old carpeting down to some fifth echelon type or being tossed out on the junk pile and it does create comment.

If you do it on a fixed time interval, every 6 years or so, I would assume that is the way it ought to be done.

General **Meyer**. It is supposed to be done that way.

Senator **Andrews**. If you can assure us that it is being done that way, and I assume the Navy base is and your colleagues in the Department of Defense I am sure they will be glad to testify to their purity and resolve as well.

General **Meyer**. I am not testifying as to my purity because I haven't heard that complaint, and I am sure we have places where that has been violated.

[The information follows:]

Building Repair Cycles

Each building component has its own repair cycle (i.e., carpets—6-12 years; interior painting—3 years; refinishing of wood floors—10 years). Maintenance activity increases during the change of occupancy, regardless of rank, to minimize inconvenience to occupants and to perform maintenance and repair that would disrupt operations or result in additional cost if performed while the area is occupied. Intensifying the maintenance activity during this period reduces down time and increases the occupancy rate.

Senator **Stevens**. Mr. Secretary, there is a 48-percent cost growth in the Apache, the AH-64 in 1 year. We appropriated $636 million for fiscal year 1982. How much of that has been spent?

First, what does it really mean in terms of numbers? Has that cost growth, what can you get for that $636 million now?

Secretary **Marsh**. Senator, I would have to defer to someone who knows that program better than I do. I can furnish it for the record, sir.

Senator **Stevens**. Is production slipping? We are informed production is slipping.

Secretary **Marsh**. This is an area of concern.

Senator **Stevens**. You haven't made the production decision yet, have you?

Secretary **Marsh**. It is really not in production, we have a few prototypes, but we have not reached an agreement that is satisfactory for production with the present proposed contract.

Senator **Stevens**. What we can't understand is that we gave you $636 million for fiscal year 1982 and the decision hasn't been made yet. We have a $965 million, almost $1 billion request for procurement in this budget.

Secretary **Marsh**. The reason the decision hasn't been made is that the costs that would lead the Army to enter into a contract have not been satisfactory. The Army has felt that the contract proposal was too high.

The reason we requested funds is we hope we can get an acceptable agreement, and if we do get the funds requested in fiscal year 1983 would go into production and begin procurement of those aircraft at an acceptable cost.

Senator **Stevens**. We are looking to see what we might defer without increasing costs. Can you tell us when this decision is going to be made?

Secretary **Marsh**. I spoke to the Under Secretary of the Army before I came over here this morning and I have the impression from him that that decision would be made within a week or 10 days, sir—maybe even sooner.

Senator **Stevens**. In view of the increased costs, can we afford the Apache?

Secretary **Marsh**. I am going to ask a professional military judgment on that. I have been assured that there is a vital need for it, but I would prefer that this committee hear that from General Meyer.

General **Meyer**. The basic concept of that attack helicopter is that it will provide something that can fight day and night. We don't have that today.

It also provides a survivable aircraft for our pilots. We don't have that today. Clearly there is a cost point at which we have to decide whether or not it is worth that, and that is what we are looking at right now as a result of discussions that are taking place.

My own view is if we do not get this attack helicopter, I am going to have to take a look at how to redesign the Army, because it has been central in the way we have looked at having a force that can fight in Europe, because it gives us flexible firepower in the Middle East or Persian Gulf, and because it can do a lot of things that you have to have some substitute for.

Clearly as you point out, there is a cost at which you have to decide whether or not you can afford it. We are in those negotiations right now, and I can't answer that question until we get that response. But it would mean a different kind of Army for the future without that helicopter.

Senator **Stevens**. Has the cost given you any indication of change in your Force structure to limit the number that you would acquire at that cost?

General **Meyer**. Yes, sir, we have had to do that already, and we have decided we would not be able to put them into some of our cavalry units and some of our other kinds of units. We have had to cut back by 90 on a cost basis.

HELLFIRE MISSILE

Senator **Stevens**. What about the missile? I understand the Hellfire missile is in trouble. Isn't that an integral part of that whole system?

General **Myer**. The Hellfire missile in not in trouble. It is an integral part of that system, but in my judgment the Hellfire missile also has a role even if we don't get that attack helicopter. It is possible to launch the Hellfire from the ground launch and do laser designation, and it is also possible to look at whether or not we can put it on some other kind of platform.

The Hellfire was going to give us the capability of being called on many of the follow-on tanks, because it would not be very prudent not to put that in the system.

My point is the two can be disconnected and we have to come to you when we get the data on the attack helicopter and answer that question more precisely for you, sir.

Senator **Stevens**. I am sure that the committee wants to support you having the best equipment possible, but the real prime question is, What do you need $965 million for if you can't figure out yet whether you are going to spend the $636 million?

Secretary **Marsh**. As I said, Senator, if those negotiations are successfully completed, that money would still be used to procure additional aircraft at a lower cost.

Senator **Stevens**. We will have to have a separate hearing later on your decision and your basis. We will put off the questions until that time.

M1 TANK PROGRAM

Let me go to the tank. It has been mentioned, and several of us did go down and take a look at the M1 tank. I can understand why the Army would rather have an M1 than the M60, but the GAO's report continues to raise serious questions about the M1 tank and the cost overruns and production rates that you are envisioning.

We have a budget request here of $2 billion for 720 tanks to be delivered in 1983. In view of the GAO's report, wouldn't it make more sense to see if we couldn't have a lesser production rate and see if we can attack the whole question of cost overruns and the uncertainties that are involved in that before we go into production of that magnitude?

Secretary **Marsh**. Senator, it is the Army's view that, one, the numbers of the new M1 tank are needed; but secondly, and more importantly, a number of the problems that have been disclosed occurred in the developmental stage. Many of those developmental problems or most, if not all, have been corrected. Those that have not been corrected will be. Subsequent test runs will show that the changes that were recommended have been made, and they are satisfactory.

Also, that the costs that you have for the M1 tank now appear to be reasonably stable. The overruns that were referred to earlier related to the time period prior to where we are now and as a result the performance of the tank is adequate, the production schedule is realistic, and the costs are relatively stabilized, sir.

Senator **Stevens**. Well, you assume that the power train problem is completely solved, Mr. Secretary?

Secretary **Marsh**. We have been advised by a blue ribbon committee, who earlier made recommendations as to what changes should be made, that they believe those changes will correct the power train problem.

General **Meyer**. The only other comment I can make, Mr. Chairman, is that I would merely remind you that as you defer buying, it is going to cost you more.

Senator. **Stevens**. That is on the assumption you are going to continue to buy the same number. That is like telling us on the helicopter that we wanted *x* number and we are going to keep *x* number in spite of a 48-percent cost growth.

General **Meyer**. We drove those down, but I am telling you the cost per unit, and the total cost will clearly go down if you are not going to buy as many, but the cost per unit is going to go up and it is on anything you buy as you defer because of inflation over time. That is what has happened to us all along, as we stretch out these buys.

As you know, that is one of the causes for the rising unit cost.

Senator **Stevens**. We are not looking at stretching out buys, we are looking at a smaller buy. The CBO estimates——

General **Meyer**. Yes, I read the CBO report, and when there was a separate hearing on the M1, more current data was brought up. The GAO had no objections to the way in which the data was presented.

Senator **Stevens**. I am talking about the operating costs. We are going to go more deeply into this M1 and I think you need to know why. The CBO operating cost and support cost problems that they identified with the M1 tank and the Bradley fighting vehicle, indicate that the tank's support costs, this is on top of the increased cost of the tank itself, was 55 percent higher than an M60A1 battalion cost. That the fighting tank costs are 20 percent on top of those of the M100 and M113 battalion.

Now, those costs pyramid. If we are going to spend 50 percent more, it is even more than that, the difference between the original cost of the M1 and what it is costing us now. I forget what the growth is, it is a factor of several times, and it is not like the helicopter. The helicopter is 48 percent growth, but there is an increase of something like $600,000 to $2.7 million a copy, isn't it?

General **Meyer**. What is the cost for the M1 tank? The cost for the M1 is $2.6 million but you understand all of the figures that went into it.

EQUIPMENT OPERATING COSTS

Senator **Stevens**. It is a cost for per vehicle and once you get it, that the support costs run 55 percent higher than the M60A1 battalions. We come back to what Senator Rudman is saying, why should we acquire so many and why shouldn't we limit M1 production and accelerate the M60A3 conversion?

General **Meyer**. I believe I answered the question about the M60 conversion.

Senator **Stevens**. Not in terms of reference to the support costs.

General **Meyer**. I will answer that.

Senator **Stevens**. It is one thing to look at it from the standpoint of how much it is going to cost in the equipment and the second thing is how much it is going to cost to operate it. We have not addressed that yet.

The ongoing budget increase that we are going to face if we fund your M1 request stares us in the face if we are going to have to find 55 percent more for support costs for the M1 in the field. That is what we are talking about, and we can't seem to get any answers.

What are we going to do to keep those costs down if we do go the M1 route?

General **Meyer**. Let me be sure you understand what the support costs are that are included in those figures, if I might?

Senator **Stevens**. Sure.

General **Meyer**. Some of the things, and as I started to lay it out, there is an M60A1 type guide. You have 54 tanks there, and we are converting to those of the tank types that we are talking about, so we don't have those. We are really talking about a nontank battalion here in the process of converting and you are not going to have those, and to compare anything with the M60A1, it is a noncomparison because we don't have them. But I accept it as a base on which you raise it.

I want to make sure you understand that you are not going to have the M60A1. We have raised up to the M60A3. We are going to go in the new M1 tank battalion to additional tanks, there will be six additional tanks in that battalion.

We have gone from having, one of the reasons that people talk about the increased costs and operating costs to the number of vehicles, we have changed from 8-ton trucks to 10-ton trucks, and you need more as you convert from the A1 to the A3. But there is additional ammunition, the cost when you look in the out years of the 120-millimeter ammunition for the new M1. That is included in there, and that is all an increase in operating costs.

It is just the increased cost of ammunition and increased cost of fuel and all of those things are included.

Senator **Stevens**. We have your estimates of supporting costs for the M1 and the FVS battalions. As we look at your own figures they show us that as we put the M1 into the field we are facing increased support costs, increased support costs with the concept of field maintenance that we thought was going to reduce some of these costs, and it is actually increasing it even more.

We are going to go into the M1 in a separate hearing, too, but what we are saying to you, General, I am not sure I am conveying it, is we are being told or this committee is being told to cut some of this money now. Yet if we give you money for the M1's, we know we face a question of raising more money for support costs than we would have to have if we gave you the money for conversions into the M60A3, as far as operating support cost money in the future.

By making the M1 decision you are in fact setting a stage if the advice we get is correct, for further force reductions. It would seem to me that you would be looking at a blend of your tank procurement so that what you would try to do would be to maintain as close as possible your on-track record as far as support costs are concerned. But if we buy the M1 at the rate you want to buy it, we are looking at a 26 to 55 percent increase in support costs in the field.

General **Meyer**. That is in our budget, and one of the things we have not done in the past is put in the O. & M. costs up front so that we were sure that when we came to you we had the readiness of those units at the level we expected.

Senator **Stevens**. My time has expired and I will turn it over to one of the other Senators.

General **Meyer**. Let me make one comment.

Senator **Stevens**. I know you understand my point, but I don't know why something isn't being done to change this mix.

General **Meyer**. The change of the mix of the M1 and M60A3?

Senator **Stevens**.: Yes, to see if we can hold the line on support costs. You can't go along with a 48-percent increase in helicopter costs, an increase of costs of the tank and then look at a 55-percent increase in the support costs of the tank once it gets into the field.

Where is the money going to come from? That is the question.

General **Meyer**. There are areas that we can look at, to hold down the support costs. One of the areas is in total ammunition that goes along. Right now we increased the amount of ammunition that goes with the M1 by about 30 tons. That takes that much additional support. That is an area that we can look at to see what we have to do in the way of cutting back. But I will just tell you it doesn't impact in my judgment at all on this year's budget, and it is the impact over time.

If we decided we wanted to come in with a mix of the A3 and the M1 with different support costs there isn't anything that we spent this year that would be wasted because you would be getting it clearer and you would be able to figure out how to do the overtime in a better way.

Senator **Stevens**. All right.

Senator Stennis is next. I am going to turn the chair over to Senator Rudman. I have to go to a scheduling conference for the floor. When we finish today, we will stand in recess until March 25, when we are going to look at the Navy fiscal year review for 1983.

I do thank you, Mr. Secretary, and I appreciate your courtesy.

EQUIPMENT FOR THE ARMY NATIONAL GUARD AND ARMY RESERVE

Senator STENNIS. Now, gentlemen, this is just relatively a small amount of money compared with what we have been talking about, but there is one thing the services have emphasized ever since I have been on the committee. That is the importance of the assignment of the Reserve forces, including the Guard, that they were a part of the planning of each of the services and would be given recognition as such and that they had a place in the sun and would be considered when a decision was made on the funds, and the equipment.

Now the practical matter of this is back in the days I used to go around and visit with those units, the Reserve and the Guard, and there was such a shortage. They were neglected and it would be embarrassing to me, in view of what I had told them about their recognition which was going to be complete and considered in the plans.

So that has gone on year after year and I think I understand that. There is little recognition money-wise given to these units. There is a little put in by the legislative branch, by this committee included here and there and yonder, but it is really very small.

So last year in the 1982 Defense Authorization Act—I would like to have the members of the committee listen to this. It is something that is important in their State.

In the 1982 Defense Authorization Act, the Department of Defense was directed to provide a report which reflects the resources being applied to modernize the Reserve forces. Now that refers to equipment and related matters.

Now, Mr. Secretary, are you familiar with that requirement and have you been called upon to supply data and material for that report? That report was due from February 15 of this year. But have you been called on to do that?

Secretary MARSH. Let me give you a little background about my emphasis on the Guard and Reserve. As you probably know, I served for almost 25 years in the National Guard and I served for 4 years after World War II in the Army Reserve.

Senator STENNIS. That is why I was confident something would be done.

Secretary MARSH. We are placing a major emphasis on the total force in the Department of the Army, and specifically on the Guard and on the Reserve. We are also very concerned about the equipment shortfall that you have mentioned.

Unfortunately that equipment shortfall all too frequently hits the Active Army as well.

The present plan of the Army with regard to the distribution of new equipment is that it will be assigned to units of the total force on the basis of their order of deployment regardless of whether they are Active or Guard or Reserve.

This means that there will be certain National Guard units and certain Reserve units that will receive equipment ahead of active duty units because they have an earlier deployment date.

Senator STENNIS. Do you mean new equipment?

Secretary MARSH. Yes, sir.

Senator STENNIS. In usable condition, you mean?

Secretary MARSH. Yes. For example, I think you will find in the Air Guard in fiscal year 1984 that the Alaska Air Guard is going to get eight brand new C-130H aircraft. This reflects DOD-wide approach to the problem. However, there is still a lot of incompatability of equipment, particularly radio equipment between Guard and Reserve units and Regular units. This is an area that we seek to address, and we have dedicated some money for the Guard and Reserve in this area. We earmarked a lot of that for communications gear, and some of it has been dedicated by the Army for new howitzers. We still have more to do on this.

Senator STENNIS. This language is directed to a report so we can get something here in writing from responsible sources as to what the needs are. We never have had anything in the way of estimates at all. This will be an official report from the Department of Defense, but I am asking them now what has been the input? That report I am told was due February 15 of this year.

It does undertake to relate to future years, plural, and it is a complicated matter, but we need it and we just can't legislate in this field until we get it. I am going to insist on that report. It is not for show, and it is for real, to get some equipment.

You have brought a few planes but I want to get some things down to the ground level, that is radios and things of that kind. It is so they can have pride and feel like they belong.

Secretary MARSH. The Army did make some references to that.

Senator STENNIS. I want to ask a companion question. We even last year put in $50 million in the appropriation bill to carry out a mission of this kind.

Now, General Meyer, what have you gotten out of that $50 million? Has it been allotted? There is nothing in the fiscal 1983 request for this line item.

This year it was dropped out.

General MEYER. Sir, for 1982 we got out of it towed howitzers for the National Guard, tactical support vehicles, field carrying vehicles, communications equipment, and materiel handling equipment for the Army Reserve. That was even more than you said. It was $172 million that was in there in fiscal year 1982. Let me tell you why I don't believe it is a good management procedure to apply resources specifically to either the Active, the Guard or the Reserve, because I believe that when we have to provide equipment for total force, let me tell you what comes.

Yesterday the commanding general of the 24th Infantry Division——

Senator STENNIS. I want to express my esteem to you. My time is going to run out. I know the system and you said $172 million and that was money out of the general bill. My question is: What have you done about this $50 million expressly appropriated for the Army National Guard and can't it be used for anything else?

General MEYER. That is $25 million for communications equipment for the Guard and $25 million for the Reserve, principally for communications equipment and night vision sights and those are all in the process of being procured.

Senator STENNIS. They are in the process now?

General MEYER. Yes, and dedicated procurement we had in 1981 and 1982.

Senator **Stennis**. What did you do about requesting a continuation of those funds for fiscal 1983?

General **Meyer**. We did not put a line in the budget for fiscal year 1983 specifically for the National Guard and specifically for the Reserves because the Army has to pull from a common pot of equipment. I think we can explain to you why that is the best way to do it, but if the Congress decides otherwise, we will do otherwise. I think if I had time I could explain to you why that makes sense.

Senator **Stennis**. You have a matter there, but the facts are that we already know the Army is not going to get as much as they need. You are now refusing to let us earmark an item for that purpose and that purpose alone.

Now, you can decline to spend the money and report back to us. But we are going to, at least I can speak for myself, we are going to hold our side of this thing and try to force something of that nature for a better deal for the Reserves and the Guard. We praise them and we say they belong and try to give them equipment and appropriation totals and then you come up with nothing.

It is just little things. It is just enough to encourage them, something that has paint on it, and it still looks nice.

General **Meyer**. Let me tell you what they are getting this year. Let me tell you what they are getting this year that has paint on it, and it looks good.

They are getting the M60A3s we have been talking about, they are getting Blackhawks, which are the new lift helicopter, and they are getting the AHIS attack helicopter. They are getting the new night vision sights and Dragon night trackers. They are getting some things here that are confidential, but generally they are getting communication equipment because they are behind in communication equipment.

These are all the most modern equipment, the same equipment going to the Active component. So there is a significant amount of equipment that will be going to the Reserve components in fiscal year 1983, both Guard and Reserve.

I can provide that for the record so you can see what happens. But you are correct, there is not a separate line item in the budget request. But I can give you a list of equipment that is going there.

[The information follows:]

Equipment for the USAR and ARNG

The 15 February 1982 Annex to Volume II, Force Readiness Report, previously provided to Congress, describes in detail what equipment is going to the Reserve Components as a result of procurement and other distribution actions for the FY 82-85 time frame. In addition, a list of selected systems with validated distribution plans for Reserve Components for the FY 82-91 time frame is provided as follows:

2 6 MAR 1982

SELECTED SYSTEMS WITH VALIDATED DISTRIBUTION PLANS FOR RESERVE COMPONENTS

(AS OF 24 MARCH 1982) (deleted)

	QUANTITY BY FY (USAR/ARNG)										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	TOTAL QTY USAR/ARNG
1. ARMOR											
o M1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
o M60A3 - TTS/Passive											
o M60A1 - R/P											
2. INFANTRY											
o Squad Automatic Weapon System (SAW)											
o Test Set, Night Vision Device (AN/TAM-3)											
o Dragon Night Tracker (AN/TAS-5)											
o Light Weight Company Mortar System (LWCMS)											
o I-81mm Mortar, XM252											
o TOW Night Sight, AN/UAS-12											
o Improved TOW Vehicle											
o Infantry Remoted Target System (IRETS)											
o Improved TOW (Modified Launchers)											
o Bottle Cleaning/Charging System (AN/TAM-4)											
o M113 (TOW)											
o M577A2, Carrier Cmd Post											
o M125 Mortar Carrier											
o M113											
o Night Vision Devices (AN/PVS-4, AN/PVS-5)											
3. FIELD ARTILLERY											
o Fire Observation Training Set**											
o Howitzer, 155mm, M109											
o Howitzer, 155mm, M198											
o Battery Computer System (BCS)											
o Position Azimuth Determining Systems (PADS											
o Ground Laser Locator Designator (GLLD)											
o Fire Support Team Vehicle (FISTV)											
o Mortar Fire Control Computer (MFCC), M-23											
o FIREFINDER Radars AN/TPQ-36											
AN/TPQ-37											
o Meteorological Data System, AN/TMQ-31											

** 1 Each is being placed at Forts Devens, McCoy, Dix and Indian Town Gap to support both USAR and ARNG training.

SELECTED SYSTEMS WITH VALIDATED DISTRIBUTION PLANS FOR RESERVE COMPONENTS

	QUANTITY BY FY (USAR/ARNG)						(deleted)				
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	TOTAL QTY USAR/ARNG
4. AIR DEFENSE											
o VULCAN M163 (SP)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
o STINGER Section HQ											
o STINGER Teams											
5. AVIATION											
o Black Hawk, UH-60A											
o AH-1S (Fully Modernized)											
o AH-1S (Displaced From AC)											
o AH-1G (Displaced From AC)											
o C-12											
o U-21***											
6. INTELLIGENCE											
o TEAMPACK, AN/MSQ-103											
o PIRANHA, AN/VLQ-4											
o AN/TRQ-23											
o COMINT/SIGINT Simulators											
7. COMMUNICATIONS											
o Special Forces Burst Commo System (SFBC)											
G76 (Power Supply)											
PP-6148 (Power Supply)											
AN/PRC-70 (Transceiver)											
OA/8990 (Digital Message Device)											
AN/TSC-99 (Base Station)											
o AN/UGC-74A(V)3											
o AN/TRC-151/152											
o TRC-117/110 (Displaced by AN/TRC-151/152)											
o Satellite Commo Terminal, VSC-7											
o AN/MYQ-4 (Formerly DAS3)											
o AN/TTC-39 (300 Line)											
o Division Level Data Entry Device (DLDED)											
o VINSON KY57											
o NESTOR KY8											
KY28											
KY38											

SELECTED SYSTEMS WITH VALIDATED DISTRIBUTION PLANS FOR RESERVE COMPONENTS

	QUANTITY BY FY (USAR/ARNG)										
COMMUNICATIONS (Cont'd)	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	TOTAL QTY USAR/ARNG
o AN/TSQ-111(Type III)Commo NODAL Ctrl Elem	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
o Radio, AN/GRC-160											
o Radio, AN/PRC-77											
o Radio, AN/GRC-47											
o Radio, AN/VRC-46											
8. ENGINEER											
o Armored Combat Earthmover (ACE), M9											
o Gnd Emplaced Mine Scat Sys (GEMSS)											
o LACV-XV (Displaced by LACV-30)											
o Generator Set 1.5KW/60Hz SLEEP											
o Combat Support Boat (UKCSB)											
o Truck, Forklift, RT 4,000 lbs											
o Truck, Forklift, RT 50,000 lbs											
o Tops Support System (Unit Sets)											
o AVLB											
o CEV											
9. CHEMICAL											
o Mask Chem/Bio, XM30, XM33, XM34											
o XM14, Decon Apparatus											
o XM13, Decon Apparatus, Portable											
10. TRANSPORTATION											
o M88A1											
o CUCV											
o Hvy Expanded Mob Tac Trk (HEMTT)											
o Truck, 5 Ton (All Types)											
o Truck, 6x4 M915											
o Semitrailer (All Types)											
o Trailer (3/4T, 1-1/2T, 4T)											
o Tank (10,000 & 50,000 gal)											

* Equipment in FY 83 Army Budget

** Congressionally Directed Buys in FY 82 Budget

*** Redistribution of U-21 Aircraft Resulting from C-12 Buys

Senator **Stennis**. Well, that is encouraging, but the bookkeepers cut you off somewhere. We know by experience here on this committee that we don't get that money spent for these purposes unless we insist on it.

MEETING OF THE NATIONAL GUARD ASSOCIATION

Now we are going to follow up on this report from the Department of Defense to give us a starting point. Now, this is for real. This is right down to the nub of things. You don't have any group anywhere in America that does more in public opinion for support for the services than these people that are members of these units.

I will illustrate. My goodness alive, we had a meeting in Biloxi, Miss., last summer of the National Guard Association, U.S.A. Here were the noncommissioned officers and they came with their wives and families and they walked in there and there were 2,000 people sitting there on that floor.

These are noncommissioned officers and I told them what we had passed here and I looked at the children and I couldn't finish my speech. You know the support they give to you people and give back in those communities, and they have responsibilities in the communities. They belong to clubs and the churches and so forth and so forth.

Well, they just felt so hepped up and when we got through there were some wives there, one had heard the speech and she had already passed the word and they locked the door and said, "You discriminated against us and we have to hear that speech. Go in and make it again."

Now what am I going to tell those people? That is the way you handle this thing and you are not going to try to continue the appropriation and you are not giving advice. We have to follow up on this.

Secretary **Marsh**. You can indicate to them that the Army shares your concerns and we hope that we can help them out.

Senator **Stennis**. It is not the concern, it is the money. They want the dough. This is old hat with us and we are going to go after you folks. I figure you, too, are capable of doing something and you can do it.

I think my time is up.

Senator **Rudman**. Senator Stennis, you just reminded me of a letter that I wrote to one of my children in college. I received a reply that the congratulations were in order and appreciated, but they would really appreciate some money.

PROCUREMENT PROCEDURES

I just want to continue briefly with my prior questioning before my time ran out. I have again looked at your task force report in which you referred to this and I am very concerned that some factors are getting into this whole question of competition, that although in the service it may seem appropriate it may be inappropriate in light of the enormous cost growth we are having in the tank program particularly, the tank program is for all of the reasons we all know, some the Army's fault and some industry's fault and some no one's fault, is far above expectation.

I am told that because of industrial base considerations and sufficiency of business considerations that there is a strong move not to second source some of the major subitems in the M1 which up to recently had been up for second sourcing.

This is only on the basis of whether or not the second sourcing would be a cost savings and if it wasn't there is no need for it.

My question is: How seriously are you going to look at the question of capacities of some of these plants which, in fact, have higher prices than some of the competition and keep them in business, if you will, by sole sourcing, if you see real cost savings in the M1 program in competitive bids from proven qualified contractors?

Secretary MARSH. Senator, I am of the view that if we can obtain substantial savings in the purchasing of components of the M1, that we are going to take advantage of those.

Senator RUDMAN. Will you also say that is right of the M60A3 conversion program?

Secretary MARSH. Yes.

Senator RUDMAN. That is all I want to know.—I am a supporter of the M1 program and it has had a lot of problems, but the chairman, Senator Stevens, and Senator Andrews and I went down there and spent a day in the field with two tank platoons, including one of the M1 tank platoons. I think the problems have been cited in the press, and I would feel better if that power train problem is solved. But even having said that I am going back to General Meyer's comments.

There is a price at which people start to get upset. You have about reached that price with the helicopter and we are close to the price with the M1 tank.

Not to take advantage of effective efficient second sourcing for both of those tank programs I think would be the worst thing you could do for this committee, for the whole Congress, and for the people of this country: to say that you are not going to save the money for some other considerations which in my view are not really significant.

I want to go on to a question on another subject and yield to Senator Kasten.

SALE OF T-700 ENGINES

I wonder if you are familiar with the statements and allegations made recently that General Electric is selling some of T-700 engines commercially at rates far below, maybe half of what the Army pays? That of course is the engine used in the Black Hawk and other related systems.

In addition, there is a recent report that the Army hadn't even learned of these things or made an effort to find out what price General Electric has been selling these T-700 engines for and the information has been denied to the Army, even though the engine was developed at Government cost.

Are any of these allegations true and what do you know about it?

Secretary MARSH. I am not familiar with the allegations, but I will endeavor to get a response. Maybe someone here knows about it.

General **Delaune**. In the recent hearings on the Black Hawk reprograming this question came up, and the project manager, Colonel Andreson, addressed that point.

The Army is looking into it, and we have written a letter similar to the one that the Navy has written to GE to get the facts we need to assist us in this.

Senator **Rudman**. If you need any further assistance, if the Army paid the development costs for that T-700 engine and it is being sold commercially and they won't tell you the price, I will bet that they will tell this committee the price.

I would like to know the answer to that question and I would like to know it fairly soon. I think we are entitled to it.

If that engine is being sold in a private market at a cost greatly reduced under that which the Army is paying for it, I think the committee ought to know about it and I think you ought to know about it and we ought to know about it soon.

General **Delaune**. We will provide that information for the record.

[The information follows:]

Pricing of Commercial Varients

The Army is aware of the allegations and has learned that General Electric is selling some commercial varients of the T-700 engine pricing often differs from similar engines sold to the military. At times commercial prices are driven below cost due to market place factors, whereas, military pricing is determined by costs incurred by year. The full price of the commercial engines is usually recouped by such vehicles as increased prices for spares and raising the price of future engine buys.

The primary concern of the Army is to see that this pricing of commercial varients does not have an adverse impact on the military price of the T-700 engines. The Army must be convinced that the government is in no way subsidizing commercial ventures either through inequitable recoupment of sunk government RDT&E funding, insufficient rental charge for utilization of government owned tooling, or improper allocation of direct and indirect expenses. The Black Hawk Project Manager and Commander, Naval Air Systems Command, have corresponded with Mr. William J. Crawford, III Vice President and General Manager, Military Engine Projects Division of General Electric Company concerning this matter. Subsequently the Navy requested the Defense Contracts Audit Agency to conduct an independent assessment. That assessment revealed no improprieties in military pricing methodologies. General Electric would not however reveal the prices it was charging commercial customers. The price varies depending on the contract and what conditions exist in the market place and is considered proprietary and sensitive.

The Black Hawk Project Manger will continue to monitor T-700 engine prices to ensure that Army interests are protected.

CHEMICAL AND BIOLOGICAL WARFARE

Senator **Kasten**. Mr. Secretary, I have supported the new chemical, binary weapons. I think these will be safer to handle and store. But I am concerned about the need for additional defensive measures.

The Soviets have repeatedly demonstrated their willingness to use chemical and biological weapons. What are we doing to prepare our forces to operate in a chemical or biological environment?

Secretary **Marsh**. Senator, first let me thank you for your support of the program.

Second, there is a substantial sum of money in this budget that relates to defensive chemical techniques. That capability has been one of considerable interest to us and is a part of the training of our forward deployed forces.

General Meyer, I believe, should more fully address the question that you just asked me.

Senator KASTEN. Let me first pose another question. The M1 tank is not currently equipped to filter out atmospheric chemicals. If my memory is correct, some of the Soviet tanks captured during a conflict in the Middle East were equipped with such filtration systems. And this was several years ago. It is my understanding that these tanks could operate in a chemical or biological environment. Is that an accurate assessment?

And the logical question is, what are we doing for our own forces? Are we planning any similar filtration systems for the M1 and for the M60's that will be upgraded?

General MEYER. Let me talk to the broader issue and what are we doing in the chemical arena.

You pointed out an area where we found we were far behind. About 6 or 7 years ago, as you probably know, we reinstituted the chemical corps and we are reorganizing. The only structure we are adding this year is chemical units to our divisions and to our separate brigades, so we have the expertise out there to work the chemical area.

We have been in the process of bringing in decontamination apparatus, individual protective items, alarms and collective shelters in all of our new systems. We are in the process of making up for years of neglect in the defensive area and that is an area where I think we could show reasonable progress.

Let me talk about the tank thing. The issue on the tank goes to how you fight a tank. The Soviets have elected to fight their tanks with the hatch closed, which limits your ability to pick up targets. You asked earlier about various branches of the service and how they do things. Our tanks and tanks of other armies of the world, exclusive of the Soviet's, generally operate with the tank open, so people can see. They have a centralized filtration system on the Soviet tanks and what we have are individual systems where the individual wears a protective garment plus he has a helmet and mask which provide him with filtrated air so that he is protected that way.

We are looking at a follow-on to the M1 tank to decide if in a follow-on we can afford the additional space that it takes up in there to go to a cover for it. One of the concerns that we have, very candidly, is that no system is air tight. The concern is, regardless of people, you are going to have infiltration of chemicals through cracks or whatever it happens to be.

Every time you fire the 120 gun of a Soviet tank you get that slack which creates gaps and which might ingest chemicals. That was the basis upon which the decision was made 5 or 6 years ago and that goes with a tank along those lines. But we are looking at whether the follow-on and block modifications we might make on the M1 tank in the 1985 and 1986 timeframe, whether it makes sense to go forward.

Senator KASTEN. Aren't the currently available protective suits impossible to survive in for more than a couple of hours?

General Meyer. It depends upon the temperature and a lot of other things. One of the things that really determines your temperature is how much cold air you blow on the brain, so these filtration systems within the tanks will cool the air onto the head and brain which keeps the temperature of the body down. I will say that is part and parcel of the whole issue we are looking at.

Senator Kasten. Is it possible to develop realistic protection in the future?

General Meyer. I can't answer that. The answer is perhaps, and we are looking at that right now in the context of the next couple or 3 years.

Senator Kasten. That you.

Senator Stennis. I have just a few more questions.

First, there is a report to the appropriations subcommittee on the Guard and Reserve equipment that we discussed previously. It is that the lost has been found since our conversation started. Here is a confidential report that was filed with the Armed Services Committee. They heard about our need over here so they sent it over to us.

We are really going to follow up on this matter and I think you are personally in sympathy with it. There is some trouble over there in the Pentagon about how you are going to keep the appropriation. That is another matter. We are going to try to force the issue of getting equipment to these units, and not in a big way, but in a way of recognition. I think if you work hard you can find a way to do that.

Now, gentlemen, I have other questions here on other subjects, but I will just ask your consent to file those questions as a part of the record, to be given attention by these gentlemen for the benefit of the record.

Senator Rudman. Those questions will be submitted.

Senator Stennis. Let me say this, too, that it is encouraging to see the members take an interest in this, and getting in here and mastering the subject matter. It is complicated and difficult, but it certainly is highly important.

Good will come from what you do and our friend here from North Dakota has been helpful over the years from the other side of the Hill. Thank you very much.

SUBMITTED QUESTIONS

Senator Rudman. Gentlemen, thank you very much for your appearance here this morning and we will be submitting additional questions for the record which you can return with the transcript.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

Manpower

QUESTION: The NATO Commander, General Rogers, testified recently that the Army does not have an adequate manpower base from which to mobilize. This situation was cited as one reason for reviving the draft. Is our manpower base really that inadequate? What are we doing about it?

ANSWER: Pretrained individual manpower (PIM) is a principal element of the Army's mobilization manpower base. PIM must fill the Total Army to wartime levels, fill unmanned units, and replace casualties until trained inductees become available. As of the end of FY81, computation of the total force pretrained military manpower shortfall indicates that ninety days after mobilization and fighting a NATO-only war, the Army would be short 179,000 trained individuals even after using all available PIM.

Since the 1977 low point in IRR strength, the Army has acted to stop losses, retain members, and manage the transfer of personnel into the IRR from the Active Component and the Selected Reserve. Two year Active and three year Selected Reserve enlistment options increase strength by longer service in the IRR.

In 1979, the Army tested IRR direct enlistment without incentives. The results were disappointing in that quality accessions cannot be attracted without incentives. The Fiscal Year 1983 Army budget, presently before the Congress, contains an IRR Direct Enlistment Bonus Program. During Fiscal Year 1981, after start up difficulties, an IRR Reenlistment Bonus Program demonstrated excellent potential for retaining IRR members. Congress did not continue this program for Fiscal Year 1982. However, OSD is requesting Congressional authority to reinstate an enhanced IRR Reenlistment Bonus Program for Fiscal Year 1983 and beyond.

Two additional initiatives (an extension of military service obligation and an added obligation for bonus recipients) are under consideration to increase IRR strength in the future. These incentives could eliminate the strength shortfall by Fiscal Year 1990.

The IRR cannot be called to active duty without a declaration of war or national emergency and members cannot be included in a Presidential 100,000 call up of the Selected Reserve. Because of the need for some individuals in such a call up, the Army has implemented the Individual Mobilization Augmentee Program. This program places individuals in the Selected Reserve and preassigns them against active Army requirements.

Retired military personnel will be recalled to meet wartime requirements. Regular Army retirees have been preassigned to installations and Retired Reservists will be earmarked for post-mobilization assignment.

Notwithstanding the various initiatives described herein, the Army's total force shortfall will not be eliminated entirely through the program years.

QUESTION: Twenty-nine percent of your 1983 budget is for military pay alone, and the overall cost runs close to 41 percent. This contrasts with 16 percent of the Soviet defense dollar for personnel. Wouldn't the draft provide higher quality personnel at much lower costs?

ANSWER: The contention that the all-volunteer Army is too expensive does not consider the direct and other costs involved in the maintenance of a system for involuntary conscription. With a draft, the costs of training would drastically increase in addition to the expense of operating the Selective Service System. Currently the volunteers enlist for average terms of service in excess of three years as compared to the two years for drafted service. First term volunteers reenlist at a rate almost three times as great as draftees. These increased terms of service and improved retention rates offset the larger personnel costs for voluntary service.

Military pay does represent a significant portion of the defense budget; however, realistic compensation is required to attract and retain the desired levels of quality soldiers. Reductions in military pay could necessitate other forms of public assistance to maintain the families of low ranking enlisted personnel.

There is no assurance that the draft would provide higher quality personnel than does the all-volunteer Army unless an inequitable system of selective conscription were instituted. The active Army and its Reserve Component are now exceeding recruiting objectives, both in total numbers and percentage of high school graduates. Current projections indicate that over 55% of all new enlistees will be in the highest mental categories (I-IIIA) prior to Fiscal Year 1984, a content greater than during the most recent draft years.

QUESTION: We are all uncomfortably aware of the criticism that the Army's manpower is often illiterate, unskilled and unable to use and maintain modern and complex weapons. Does that remain a valid criticism? What are you doing about it?

ANSWER: It is not valid. The Army is steadily improving the quality of accessions to ensure that capable soldiers are available to operate and maintain current and future weapons' systems. We are recruiting more high school diploma graduates and Category I-IIIA's because they have a greater potential to be leaders and can assimilate the technical knowledge necessary to operate and maintain modern weapons' systems. There has been an improvement in the quality of accessions since FY 1980. The Army enlisted 80% high school diploma graduates and 40% Category I-IIIA's in FY 81 compared to 54% and 26% respectively in FY 80. Program ramps for FY 82 continue this thrust with over 100,000 HSDG's to be accessed. The FY 82 program is well on target and will continue the FY 81 momentum toward quality soldiers. At the same time, we are reducing category IV enlistees to meet congressional constraints of 25% in FY 82 and 20% in FY 83. Accessions with less than fifth grade reading level comprehension have been decreased from 5.7 percent in FY 79 to less than one-half percent in FY 81. As a result of this change, the ability to understand military orders and instructions is improving. The overall reading grade level in FY 81 was 9.0 compared to 8.5 in FY 79. We are also improving the career force by reenlisting better qualified soldiers with potential to be non-commissioned officers and supervisors. The Army is emphasizing enlistment and retention of quality soldiers.

QUESTION: Perhaps, in the absence of a draft, a substantial force reduction would help the Army develop a better trained, more ready force of soldiers. Has that alternative been considered?

ANSWER: The decision to man the active force at essentially 90% of wartime authorization creates a degree of risk that is judged acceptable during peacetime. To make a "substantial force reduction" to eliminate that risk would generate two significant problems: first, it would preclude the Army from having the capability to meet its obligations and perform the missions worldwide due to a lack of forces; and second, it would unduely lengthen the time required to field fully manned and equipped divisions, since manning, equipping, and training completely new units would take much longer than filling existing units.

BUDGET PROFILE

QUESTION: We note from your tables (page 8) that the Army's share of the defense budget is steadily declining (24.6 percent in 1981, 23.5 percent in 1983). Can you explain why?

ANSWER: The table on page 8, which was computed using the Total Obligation Authority (TOA) submitted in the Fiscal Years (FY's) 1982 and 1983 President's Budget, does not include DoD contingency funds. These funds are held at DoD and distributed midway through the year of execution. If DoD distributes the contingency fund as planned,the Army's FY's 1982 and 1983 TOA percentage of the Defense Budget would be 24.8 percent and 24.1 percent respectively.

QUESTION: We also note from your tables that the long downward trend in constant dollars of support for the Army beginning about 1969 is now reversed and we have risen back to the post-Vietnam War level of about 1970. What is the right level?

ANSWER: The Fiscal Year 1983 Army Budget was developed in consonance with the Secretary of Defense's guidance. Aided by the Joint Chiefs of Staff, the Secretary of Defense translates broad national objectives and policies into military objectives and strategies. Prescribed strategies form the basis for developing the military force structure around which resource allocation decisions are made. The Army's budget level is directly related to any changes in national objectives and policies.

QUESTION: It would appear now that we must return to the high levels of the Vietnam War era to achieve our current military goals. Can the nation's economy really sustain that kind of peacetime defense spending?

ANSWER: The Army portion of the overall defense budget is consistent with, and does not jeopardize, a sustained, healthy National economy.

Rapid Deployment Force

QUESTION: The investigative staff working for our colleagues on the House Appropriations Committee reported recently that the Rapid Deployment Force is becoming a top-heavy bureaucracy with uncoordinated and unrealistic planning. Have you had a chance to respond to that criticism? What is the Army's rebuttal?

ANSWER: The Rapid Deployment Joint Task Force is at present a separate joint task force and will become a Unified Command on 1 January 1983. As such, the details of its organization are determined by the Commander, RDJTF in conjunction with the Joint Staff. However, I think in response, two points should be made relevant to Army concerns. First, it is essential to understand what we are trying to do in Southwest Asia. In effect we are building a Unified Command from scratch in a distant and desolate part of the world with few committed allies and little or no existing infrastructure. The RDJTF must, in 18 months, create a headquarters structure, as complex as EUCOM, capable of managing a theater of war using existing forces. This is a formidable task, and its accomplishment takes people. Second, I am responsible for determining the Army Component of the RDJTF command structure. I assure you that this project is equally difficult and involves committing existing Army planning assets of the XVIII Airborne Corps as well as regular and reserve staffs from Forces Command. By using existing forces and drawing heavily on the reserves, we have managed to keep staff expansion to the minimum within the Army.

QUESTION: What is the total in your 1983 budget specifically dedicated to the RDF? How does that compare to the current year's spending?

ANSWER: Army units performing other missions are assigned to the Rapid Deployment Force - Army (RDF-A) troop list for contingency purposes. This list includes both active and reserve units. Also, we budget for goods and services, not for units or for management purposes such as "readiness" or "deployment". For these reasons, it is not possible to be precise about funding for the RDF. However, we have identified approximately $403 million in the FY 1983 budget which is in support of RDF-A specific and applicable programs. Current year support for RDF-A specific and applicable programs is $249 million.

QUESTION: The Military Construction request includes funding for the first of two staging sites for the RDF. If approved, operating costs will soon surface in the defense bill. Is the Army or the JCS considering any alternative RDF basing such as shipboard staging?

ANSWER: In Southwest Asia the United States faces an initial strategic disadvantage because of the long lines of communications which force us to operate at the very limits of our strategic reach. Consequently, the United States must develop a more permanent infrastructure which can support a deterrent force presence as well as facilitate and accelerate reinforcement.

An improved deterrent posture in the Middle East/Persian Gulf area can be achieved by a continuous military presence in the region or on its periphery. The issue is what form the presence should take. Our current deployment of naval forces in the Indian Ocean and Arabian Sea provides a low-visibility military presence. This presence may need to be expanded. (Deleted).

Therefore, in the interim, we must continue to develop regional staging facilities which could be used by our deploying forces in time of crisis, either for purposes of deterrence or to facilitate onward movement to an objective area. Such facilities would also provide storage sites for prepositioned supplies and equipment thereby reducing strategic lift requirements and enhancing our power projection potential. Other alternative RDF basing proposals such as shipboard staging and enhancements to our strategic lift force are receiving careful consideration.

Each alternative provides clear military advantages, but must be weighed against the cost to US commitments in other parts of the world, impact on overall readiness of the affected Services, and immediate and long-range cost benefits. The Army, in conjunction with the JCS, is continuing to evaluate these options.

PROCUREMENT BURDEN

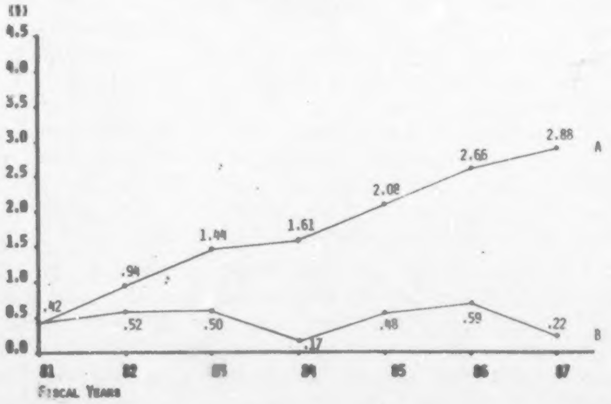
QUESTION: How confident is the Army that sufficient resources will be available to operate and maintain all these major new weapons systems? What is your estimated cost of deploying, operating, and maintaining these systems in fiscal year 1985?

ANSWER: The Army is fully confident that sufficient resources are now programed through FY 1988 to operate and maintain all new or modernized weapons and other equipment systems. This confidence is due to the special funds programing system used to determine resource requirements. This system includes the annual publication of detailed costing factors and related instructions; a detailed cost estimating report submitted by each major Army command for each type of equipment system they are scheduled to be supporting; and a formal Army review of these cost estimates. This process is repeated annually for the Five Year Defense Plan based on current cost factors and expected distribution quantities thereby updating and improving the resource program for those years. The programed O&M resources for deploying, operating, and maintaining these systems in fiscal year 1985 is $2.09 billion as of the FY 1983 President's Budget.

QUESTION: Do you have an updated version of the graph we discussed at some length last year depicting the sharp rise in the cost of operating and maintaining modern systems?

ANSWER: An updated version of the graph in question as of the FY 1983 President's Budget follows:

OPERATION AND MAINTENANCE, ARMY
FY 1983 PRESIDENT'S BUDGET
EQUIPPING THE FORCE
($ IN BILLIONS)



The rapid growth in the Equipping the Force program is reflective of four distinct factors. The first factor is the cumulative nature of the funding program (Line A). Funds being requested for a particular fiscal year are not just for the one time and recurring support of the new or modernized equipment actually being delivered to the field in that year. The requested funds also provide for all the recurring support for equipment of the same type delivered in previous years. The Army has chosen to program and budget its equipment modernization funds in this manner in an effort to define all the costs of Force Modernization and, through this visibility, better manage and control these resources. If the Army did not manage the program in this manner funds associated with support of deliveries in prior years would not have visibility, only the increased funds for each particular fiscal year would have visibility (Line B) which would not promote total program management.

The second factor concerns any increased operating cost of the new equipment over that which it replaces. For example, it costs more to operate and maintain a Bradley Fighting Vehicle than the M113 Armored Personnel Carrier which it replaces.

The third factor is that the program includes new systems designed and introduced to meet a new threat or permit the Army to accomplish its mission more effectively which do not replace an older system. For example, the Multiple Launch Rocket System significantly increases the Army's combat capability and does not replace an older system of the same type.

The fourth factor is the overall increase in the number of systems being individually funded and centrally managed at Department of the Army Headquarters.

Additional details regarding this issue are available in Volume III, President's Budget.

QUESTION: The Army is one service that seems to be committed to developing a cost accounting and estimating system for longterm O&M costs for weapons systems. But GAO tells us preliminarily that there are some serious deficiencies in this system. Can you comment at this point, and is anything underway to correct these alleged deficiencies?

ANSWER: GAO findings to date which have been brought to the attention of the Army highlight management problems with FY 1981 funding execution and accounting and the potential impact on FY 1982 funding caused by changes to quantities of equipment systems expected to be delivered to field units in that year.

Specific management initiatives have been introduced in FY 1982 to improve the management of force modernization resources. Starting in FY 1982, major Army commands are being required to report their spending for this issue. This feedback will permit any necessary reallocation of funds among systems and commands and promote improved cost estimating and budgeting in the future. This is now an offline report as the Army's automated accounting system is not currently capable of capturing costs by individual type system. Action is underway to make necessary modifications to automate this process as quickly as possible.

Changes in quantities of equipment systems expected to be delivered and supported does impact on resourcing requirements. These changes are usually a result of changes to the equipment production schedule. To improve the management of OMA resources under these conditions a new schedule has been added to the major Army command's Command Operating Budget to facilitate necessary reallocation of programed resources between equipment systems and commands prior to budget submission. In the year of budget execution, DA Headquarters routinely monitors quantity changes and, when appropriate, initiates actions to promote the efficient management of these limited resources.

Field Maintenance

QUESTION: With the delivery of new weapons systems, the Army is shifting primary maintenance to the field level, with a variety of diagnostic equipment being developed. However, many critics of this "fix forward" concept, including a departmental task force, think the Army should depend more on established depots. Secretary Marsh, General Meyer, what is your position?

ANSWER: Forward support maintenance is the term used to describe maintenance operations which are accomplished as far forward as maintenance personnel are available and there is a means with which they can be transported with appropriate tools, test equipment, and repair parts.

The thrust of the forward support maintenance doctrine is: maximize combat time by minimizing repair and evacuation time. We want to orient all aspects of logistics to minimize repair, evacuation, and waiting time critical to operational availability. The premise upon which forward support maintenance is based envisions that maintenance will be done as far forward and in as expeditious a manner as practicable. If the repair is going to take an extended period of time or parts are not available, the weapon must be evacuated.

Forward support maintenance is a necessity today. The entire thrust of combat service support, including maintenance, is forward. As a result of the Middle East (ME) War in 1973 where both sides sustained devastating losses in relatively short times, followed by field repair to restore damaged equipment, an extensive effort was initiated within the Army to evaluate current maintenance doctrine. Actions/studies such as Division 86, Corps 86, and Restructured General Support (RGS) were initiated to revise maintenance concepts and organization.

Forward support maintenance is not a specific location on the battlefield. Prior to a maintenance support team going outside its maintenance area, it must be able to satisfy at least three criteria to effect expeditious and efficient on-site repairs: have a means of transporting the team qualified to affect the repairs with tools, test equipment, and repair parts; possess reliable and accurate diagnostic capability; have the right quantity and range of repair parts.

Headquarters TRADOC/U.S. Army Logistics Center have developed a TRADOC pamphlet which will clarify fix forward doctrine. The Army believes forward support maintenance ("Fix Forward") is a workable, time-proven maintenance principle.

QUESTION: Although the Army is moving to the field maintenance concept, there is no discernable increase in maintenance personnel attached to the battalion levels. Why?

ANSWER: Emerging maintenance doctrine embraces forward support maintenance and causes doctrinal changes to our maintenance battalion structure which will improve our operational efficiency without increasing personnel. The maintenance battalion at the Division and the Forward Support Battalion in each Brigade will have tailorable maintenance teams with the requisite tools, equipment, and correct mix of personnel along commodity lines. At the user level (battalion, company, battery) organizational maintenance has been centralized at maneuver battalion level for control and efficiency. The user level also has mobile maintenance teams structured to the force with the communications system, mechanics and tools to do the job.

VIPER

QUESTION: Please bring the committee up to date on the VIPER anti-armor weapon program. Where does the testing and evaluation mandated by Congress stand at this point? What is the weight criterion being used by the Army? How many weapons do you anticipate will be available for evaluation in this shoot-off?

ANSWER: The Army is taking the lead in a DoD evaluation of light antitank weapons, and will be responsible for weapons weighing 14 pounds or less, while the Marine Corps is responsible for those weighing more than 14 pounds. Each service will monitor the efforts of the other. The Army, with OSD(USDRE) participation, has established a three phase program to comply with Congressional language and Army requirements. Phase I of the program is in progress; screening criteria are being established, with advertisement (in Commerce Business Daily) no later than 15 May 1982, at which time Phase II begins. The Army will be ready to test by 1 August 1982 (77 days following advertisement, within the 90 day requirement in the Congressional language). Participating contractors will also be asked to provide a schedule and fixed price proposal for rounds to be purchased for Phase III, and proposals for quantity production, costs, and facilitization. These will be validated by OSD Cost Analysis Improvement Group and Product Engineering Services Office. All Phase II testing will be completed by 31 July 1983. Following test reports, a Joint IPR (Army/USMC) will be held to determine which candidate systems meet requirements for combat effectiveness, costs, and production capability of Operational and further Developmental Testing (DT/OTII), leading to an IPR for type classification and production decision. Most likely candidates, based on weight alone are the (German) Armbrust and Armbrust PIP, Improved (Norwegian) LAW M72-750, (Israeli) Pickett, and (UK) LAW-80 without spotting rifle.

9mm Handgun

QUESTION. The Army recently cancelled its effort to start a 9mm handgun procurement program. Please bring us up to date. Were none of the weapons offered for testing considered suitable?

ANSWER. The Army, as executive agent, initiated the acquisition process on 29 June 1981 in response to the Joint Service Operational Requirement (JSOR) effective 10 June 1981. A comprehensive test program was completed on 29 January 1982 and normal source selection procedures were utilized to evaluate contractor proposals and testing results. The results of this thorough evaluation process revealed that the submitted weapon samples of all offerors had substantially failed to meet the essential requirements of the JSOR as contained in the procurement solicitation. Primary areas of failure were: Reliability, operation in adverse environment, and operation in adverse climatic conditions. In accordance with the Defense Acquisition Regulations, the Army cancelled the procurement action. OSD concurred with this action. A report addressing the testing of the 9mm handgun was forwarded to Congress on 1 March 1982.

C-12

QUESTION: Why does the Army require 12 more C-12D's as budgeted for in 1983? You didn't ask for any last year. What is your procurement program for this small transport plane?

ANSWER: C-12D's in the Fiscal Year 1983 President's Budget Estimate represents two procurement programs; C-12 Utility Aircraft (six aircraft) and Improved GUARDRAIL V (six aircraft).

Six of the twelve C-12D aircraft are to support overall Department of Defense Attache/Security Assistance Organization requirements and are not funded or applied against Army utility aircraft requirements. The remaining six C-12D aircraft are to be utilized in the Improved GUARDRAIL V program as RC-12D's. The RC-12D is specially configured to accommodate electronic intelligence sensor packages. This procurement represents the third Improved GUARDRAIL V system.

Due to higher priorities and budget constraints, the Fiscal Year 1982 and Fiscal Year 1983 budget submits did not request C-12D's for the Army utility fleet. This does not lessen the Army's need for the transport/utility aircraft, but postpones the acquisition. The Army is currently short 162 fixed wing utility aircraft in its active fleet. The Army has 150 vintage substitute aircraft currently filling the void. However, these are being phased out of service over the next 5-6 years due to age, decreasing safety margin, low cost effectiveness, difficult supportability and inability to meet mission needs. In order for the Army to meet its requirements and support the field commander, a procurement program of approximately 20 C-12D's per year for 8 years would be required to fill this void. The current Army plan is to begin acquiring the C-12D's in Fiscal Year 87.

The Improved GUARDRAIL V Fiscal Year 1982 budget request was for modification of C-12's previously approved by Congress and already purchased. Because these aircraft were in the Army inventory, no aircraft procurement was required. The Fiscal Year 1983 budget request does in fact request additional aircraft which will be utilized in the third Improved GUARDRAIL V system. The Army plans to request six additional RC-12D aircraft in Fiscal Year 1984 for the Improved GUARDRAIL V program.

Depot Maintenance

QUESTION: A total of $1.7 billion is requested for the overhaul and repair of systems. If approved, this funding would be sufficient to eliminate the hardware backlog. Despite this, your statement suggests that a backlog would still exist in the maintenance support activities. Could you elaborate on the nature and scope of this problem?

ANSWER: The Depot Maintenance Program has two activities, Depot Materiel Maintenance Activities and Maintenance Support Activities.

Depot Maintenance Activities consist of the overhaul, repair, and renovation of unserviceable but reparable materiel for issue to troops in the field. Included in this program is the modernization of existing materiel to increase combat effectiveness, safety, reliability, and/or maintainability.

Maintenance Support Activities include maintenance technical and engineering support services; printing of maintenance publications, maintenance, technical and new equipment training of depot maintenance personnel, and field technical assistance.

The FY 83 funding of $476 million for Maintenance Support Activities leaves unfinanced requirements in the amount of $251 million. These funds are primarily in three principal functional areas: maintenance engineering, training, and publications.

Execution of planned programs and projects for maintenance engineering, technical assistance, and technical publications where contractual effort cannot be utilized will be jeopardized if our first priority to restore the 394 personnel spaces is not recognized.

Our highest priority requirement for funding is $62 million to accomplish urgent programs through contractual effort.

Of this amount, $23 million would be used in the engineering area to effect economies in maintenance operations, parts usage, and equipment storage for several types of equipment, such as the M60 series tank and the M113 Family of Vehicles. Not funding this requirement will preclude performance of these maintenance engineering tasks and resolution of field deficiencies. An additional $5 million of the total amount would result in the completion of product improvement proposals for engineering changes necessary for the UH-1, RV-1, and EH-1 aircraft. Without this funding, maintenance costs in parts usage and manhour consumption will increase and safety of flight enhancements will have to be deferred.

The balance of the $62 million would be used to: update technical publications, a $23 million requirement, without which delays in parts requisitioning will occur thereby impeding the repair of equipment in the field; $8 million for New Equipment Technical Training and depot training necessary for the initial transfer of knowledge and to insure our industrial base is skilled in the latest state-of-the-art maintenance techniques; and $3 million for printing of the revised publications which will expedite the distribution of correct information to the field.

Given the restoration of the 394 personnel and the financing of $62 million critical requirements, as previously mentioned, an additional $25 million and 545 personnel would further reduce the unfinanced requirements, primarily in the areas of publications and maintenance engineering. This would leave an unfinanced requirement of $164 million for lesser priority programs in the same functional areas.

REAL PROPERTY MAINTENANCE

QUESTION: A total of $275 million of the Army's requested program supplemental is for the maintenance and repair of real property. This follows a congressional add-on of $200 million. Could this funding be effectively obligated prior to the end of the fiscal year?

ANSWER: Yes. The additional $275 million for real property maintenance can be effectively and efficiently executed in FY 1982. The huge backlog of facilities maintenance projects assures application of dollars to high priority needs. Army facilities engineers are in the process now of completing design work and posturing the procurement packages for obligation of funds as soon as they are available.

REAL PROPERTY MAINTENANCE

QUESTION: Why can't additional facility maintenance funding await the 1983 bill?

ANSWER: The depressed economic situation today is conducive to receiving better competitive bids from prospective contractors. The longer we wait, the higher the possibility that this favorable situation may change. Also, inflation continues to drive costs upward over time and deterioration of neglected facilities exacerbates the problem of containing the repair job within the scope of the project design. In other words, we can probably get more done with the same $275 million in fiscal year 1982 than we could in 1983. Since $189 million of the supplemental request is targeted for facilities in the US, the impact on a severely depressed building industry should provide some benefits to the domestic economy as well as improving living and working conditions for American soldiers.

QUESTION: Of the supplemental amount requested, $34 million is intended for Europe. Wasn't the original add-on of funds in the FY 1982 bill directed to facilities in Europe? How is the 1983 funding allocated?

ANSWER: No, the Congressional add-on of funds in the FY 1982 bill amounted to $119 million for the Army real property maintenance program, of which $36 million was allocated to Europe. During the budget formulation process, Europe had already received a substantial increase in OMA funds for facilities maintenance. Since there were significant deficiencies in other commands, the balance of the Congressional add-on of funds was allocated to them.

The FY 1983 funding for facilities maintenance is allocated by activity group as follows: Europe -- $531.1 million, Forces Command -- $273.8 million, Pacific -- $80.8 million, Communications and Intelligence -- $15.3 million, Central Supply Activities -- $50.5 million, Training and Education -- $219.5 million, Medical -- $11.0 million, and Administration and Associated Activities -- $21.8 million.

QUESTION: Why the emphasis on Europe?

ANSWER: Europe is where the problem is concentrated in terms of backlog of maintenance and repair. More than 55 percent of the Army backlog, or $1.3 billion of the total backlog of $2.3 billion, is there. We have substantial problems in facilities affecting the living and working conditions of American soldiers. On 1 April 1981, the Commander in Chief, United States Army, Europe submitted a Special Report to the Congress of the United States on "Living and Working Conditions in United States Army, Europe." This report describes in both narrative and pictorial form the deplorable conditions now existing in Europe. One statement in the report is this: "...a great nation must project an image that gives confidence to those who observe it and satisfaction to those who represent it." The present condition of many facilities in Europe does not accomplish these objectives. For these reasons, the Army is now emphasizing the facilities maintenance program in Europe.

TRUCKS

QUESTION: The amounts allocated in this budget for procurement of 5-ton and 10-ton trucks constitute increases of approximately 40 percent and 85 percent, respectively, over the FY 82 amounts. The FY 84 amounts would return to FY 82 levels. Is there any reason why we should't level out the rate of procurement of these trucks?

ANSWER: The FY 83 budget should not be reduced. The Army needs these trucks. The FY 83 Budget Request for the 5 ton truck - $392.7 million - and the 10 ton truck - $374.1 million - constitute increases of 30 percent and 86 percent, respectively, over the FY 82 Budget Request. While it would be desirable to maintain the FY 83 levels through 1984, the overall Army Total Obligational Authority (TOA) priorities are such that this is not feasible. Nonetheless, our truck asset posture dictates that we do not reduce FY 83 funding. The contractors for these two vehicles can accommodate this increase in FY 83 without undue turbulence in their production facility.

CHINOOK-47D

QUESTION: It is proposed that in FY 83 we begin to accelerate modernization of the Chinook helicopter in order to complete this program four years early in 1986. What would be lost by returning to the original schedule?

ANSWER: The original program schedule, with a production rate of three aircraft per month, had a completion date of Fiscal Year 1994. The Fiscal Year 1983 budget request accelerates the production rate to five per month beginning in Fiscal Year 1986 and completes production in Fiscal Year 1990, four years ahead of the original schedule. Going back to a three per month production rate has a near term savings of approximately $17.6 million in Fiscal Year 1984, but a total procurement program increase of an estimated $473 million.

The three per month rate would delay fielding in Europe by nearly four years, greatly impacting our European combat readiness. Our CONUS readiness would also be hurt as many A and B model CHINOOKs would reach the end of their programmed service life and would have to be stored instead of entering the modernization program. Commencing in Fiscal Year 1985, 10 unprogrammed CH-47C models would require depot overhaul at a cost of $28 million annually at Corpus Christi Depot or $50 million annually at the contractor facility if Corpus Christi were unable to accept the added work load.

At present, the Army's aerial cargo carrying capability is inadequate. A delay in the fielding of the CH-47D (modernized CHINOOK) will compound the problem and decrease overall readiness by not providing this desperately needed, upgraded medium lift helicopter in a timely manner.

The CHINOOK Modernization Program is still a viable candidate for multiyear procurement beginning in Fiscal Year 1983. Funding on a multiyear basis will save approximately $56 million through Fiscal Year 1986. Returning to the three per month production rate would substantially reduce or negate these savings.

BUDGET FOR TECHNOLOGY RISK

QUESTION: Mr. Secretary, can you explain why the Army has requested $87.1 million in the R&D account for budgeting for technological uncertainty?

ANSWER: For major systems in research and development, the Army employs a concept of cost estimating which considers risk - Total Risk Assessing Cost Estimate (TRACE). The intent is to budget sufficient funds to conduct the program at the most realistic cost estimate, thereby providing funds for technical uncertainties which invariably appear during development. The Army uses this costing concept for major systems since it recognizes the uncertainties of development and provides funds to sustain the program which would otherwise be delayed while awaiting approval of additional resources.

The TRACE concept has been in use since it was briefed to the Senate Armed Services Committee in February 1975.

QUESTION: Some of these programs are rather mature and are entering the procurement phase, such as the Pershing II and the Hellfire missile. Can you explain why systems such as these would need additional R&D funds to cover technological risk when they are moving into procurement?

ANSWER: While it is true that some of the programs are entering the procurement phase, all of the 12 projects which have funds budgeted for technical uncertainty are still in various stages of development. Pershing II and Hellfire missile programs are both in the final stages of engineering development. Due to the concurrency of production and testing during this period technical problems must be resolved rapidly to preclude costly production schedule delays. Recent testing in the Hellfire program has indicated the probable need for some minor technical changes before full production begins. We expect now a need for some portion of the Hellfire risk funds.

QUESTION: What would be the effect of a deletion of the technology risk addition of $87.1 million on the 12 programs identified as receiving these funds?

ANSWER: A direct assessment cannot be made as these funds are budgeted for unknown technological uncertainty. The risk of not completing the developments as planned would increase. Should any technical problem arise in the systems, there would be no way to quickly apply the resources required for resolution resulting in delays more costly than the risk moneys budgeted.

TECHNOLOGY BASE

QUESTION: Can you explain why the Army Defense Research Sciences budget has increased from $157 million to $199.9 million?

ANSWER: The Army Defense Research Sciences budget estimate for FY83 as submitted to Office of the Secretary of Defense in October 1981 was $174.7 million. This was based upon a FY82 request of $165.0 million. The FY82 budget contained a $22.0 million amendment to begin much needed research in chemical/biological warfare defense. The final FY82 budget was cut by Congress to $156.6 million. OSD adjusted the FY83 budget as follows: $8.5 million was added to allow for a modest 3% real growth above the projected FY82 request; $10 million was added to begin to upgrade instrumentation at universities doing contract research for the Army; and $5.0 million was added as a result of a 15 December 1981 recommendation by the Defense Review Board to increase university research in areas such as vertical lift technology and chemical/biological defense. An additional transfer of $2.6 million was directed by Congress from the Navy to the Army as lead service for infectious disease research. The total $200.8 million was later reduced to $199.9 million by subsequent inflation adjustments.

ADVANCED TECHNOLOGY DEVELOPMENT

QUESTION: The advanced technology development account has been increased by nearly 50 percent this year, from $210.6 million to $314.5 million. What programs are driving this account upward so rapidly? Is not much of this attributable to Army laser program R&D?

ANSWER: The Army's advanced technology development portion of the Research, Development, Testing and Evaluation Appropriation has been increased from $210.6 million to $314.5 million from fiscal year 1982 to fiscal year 1983, a total increase of $103.9 million.

Of the $103.9 million increase, $7.7 million represents the anticipated inflation in the fiscal year 1982 amount to fiscal year 1983. Thus, $96.2 million is the increase in programs between FY82 and FY83. Approximately one-third ($33.1 million) of this increase is the funding for two laser projects. These projects represent technology which has matured to the point that significant battlefield contributions are possible. It is to evaluate these battlefield contributions that the Army seeks to build prototypes of Forward Area Laser Weapons and the Close Combat Laser Assault Weapons.

Another $30.5 million (approximately another one-third) of the increase represents the Army's building of prototypes in three other areas of maturing technology. An amount of $10.9 million is requested for demonstration of new combat vehicle armor and new armor-defeating techniques, and $10.7 million is the R&D portion of the funding for the High Technology Test Bed at Ft Lewis, Washington, in which prototypes of new systems will be tried out in a field environment by the soldiers who would use them in combat. The FY83 effort includes a distributed data collection system, the use of netted radar, and a low cost vehicle navigation instrument, and other tasks directed to applying high technology to the equipment in a light division with minimum developmental efforts and maximum battlefield effectiveness. Finally, an additional $8.9 million is requested to fund prototyping of a Fiber Optics Guidance system for missiles, and other missile and rocket components.

Taken together, these four program elements increase the FY83 request over the FY82 budget by $63.6 million. Thus, two-thirds of the program growth in Advanced Technology Development will fund these efforts to build and complete prototype systems before committing funds to the development of a particular system. The other increases are accounted for in much smaller increments in many other programs.

LASER ON THE BATTLEFIELD

QUESTION: The Army has two important laser programs for close combat and air defense battlefield applications. Without going into classified detail, is the Army concerned about the vulnerability of our electro-optical systems to Soviet laser attack on the battlefield? Do you have a coherent plan to address the problem?

ANSWER: The Army is concerned about the vulnerability of our own electro-optical systems to Soviet laser attack on the battlefield. In 1981 the Army published a Laser Countermeasures/Counter-Countermeasures (CM/CCM) plan and charged the Materiel Development and Readiness Command (DARCOM) with executing the plan. The plan pursues new technical countermeasures to laser weapons and applies these to critical vulnerable weapon systems.

LIGHT INFANTRY DIVISION

QUESTION: General Meyer, can you describe in greater detail the initiatives the Army is now undertaking at Fort Lewis, Washington, in support of the High Technology Light Infantry Division concept?

ANSWER: Some eighteen months ago the Army established the High Technology Test Bed (HTTB) at Ft. Lewis, WA. Its purpose is to validate, operational concepts, and develop the organizations and materiel needs of a new division called the High Technology Light Division (HTLD). The operational concepts for the HTLD are based on the precepts of the AirLand Battle doctrine. They require highly mobile, light, yet lethal units conducting maneuver warfare on a highly fluid battlefield.

In order to validate these concepts an extensive evaluation program has been developed extending from FY81 through FY88. That program peaks in FY84, FY85 and FY86 and then closes out in FY87 and FY88. The Army's objective is to field the first prototype HTLD in FY85.

The HTTB program is an integrated effort of three major Army commands (Training and Doctrine Command, Materiel Development and Readiness Command, and Forces Command) and the 9th Infantry Division. The Army is working closely with the US Air Force and the US Marine Corps in developing the HTLD. Both services are providing full time liaison officers for this project. In addition, New Zealand, Australia, the United Kingdom, and Canada are providing full time special project officers.

This is a highly complex program. It presents the Army with unique challenges in force development, materiel requirements and acquisition, training and discipline, command and control, and the whole spectrum of military intelligence. This project is one of the Army's highest priorities.

QUESTION. What kind of flexibility will moving toward light infantry yield for our forces?

ANSWER. Light Infantry provides an essential, flexible and versatile component of our combined arms team. They are capable of rapid strategic deployment and are highly effective in terrain which restricts the maneuver of our armored and mechanized forces. However, there are currently serious deficiencies in their capabilities. Our efforts to redesign our light infantry divisions, through the High Technology Test Bed are aimed at substantially increasing their firepower, tactical mobility and sustainability on the one hand, while simultaneously decreasing the amount of lift needed to deploy them strategically. The fielding of the High Technology Light Divisions beginning in FY 85 will enable the Army to provide these rapidly deployable, capable and fightable, contingency mission forces to the unified commands. These units are being optimized for employment in South West Asia but will have great utility for world-wide contingencies including Central Europe. This capability will provide a much greater degree of flexibility in responding to crises than we presently have. It is not our intention, however, to replace heavy divisions with light divisions in the Army's constrained force structure. The capabilities of both types of divisions are essential and compliment each other.

QUESTION: What are the most important R&D initiatives connected with this concept? How much funding is involved?

ANSWER: The HTTB considers the following R&D initiatives most important to their program. The requested funding to support these initiatives is as indicated.

R&D Initiative	$Requested
Distributive Data Systems	$6.5M
Laser Technology Applications	$ .4M
Netted Radar	.8M
Vehicle Navigation Systems	.6M
Mast Mounted Sighting System	2.5M
Low Impulse Hyper Velocity Weapons	18.0M

LIGHT ARMORED VEHICLE (LAV)

QUESTION: Can you discuss in greater detail the Light Armored Vehicle (LAV) procurement program. What light armored vehicles are you considering for procurement? How many alternative vehicles are involved?

ANSWER: The Light Armored Vehicle (LAV) program is a joint Army/Marine Corps effort that requires the competitive selection and procurement of an essentially off-the-shelf combat vehicle. The program was initiated with release of a LAV Request For Proposal to industry in April 1981. Eight vehicle proposals were received from industry in June 1981. In mid September 1981 a joint Source Selection Evaluation Board completed review of industry's proposals and made recommendations that led to the selection of four vehicles for the competitive test program. The four vehicles selected were the V-150 Commando, a four wheeled vehicle produced by Cadillac Gage of Warren, Michigan; the V-300 Commando, a six wheeled vehicie, also produced by Cadillac Gage; the Piranha, an eight wheeled vehicle, produced by General Motors of Canada; and the Scorpion, a tracked vehicle, produced by Alvis Limited of Coventry, England. Tests of the vehicles began in November 1981 and will be concluded in May 1982. A source selection process will select the winning vehicle based on test results and industrial responses to the LAV Production Request For Proposal which was released in December 1981. Both Services anticipate signing a production contract for vehicles in July 1982. At this time the Army plans to procure 680 LAV's armed with the 25mm BUSHMASTER cannon in a two man turret. The Army's budget reflects plans to procure other LAV's in later years. We specifically plan to procure a Light Armored Squad Carrier (LASC) and a Light Armored Recovery Vehicle (LARV). Options are open as to the source of the LASC and the LARV. By that I mean, the concept of operations for the light divisions will be a driving factor in determining the specific vehicle(s) that will fulfill Army requirements. At this time we are conducting operational tests for light forces in our High Technology Test Bed Division at Fort Lewis, Washington. The operational analysis provided by the High Technology Test Bed Division will impact a June 1982 decision on both the type and source of vehicles to fulfill other roles and missions for the light forces. To further clarify what I mean, let me point out that the High Technology Test Bed Division is presently examining a concept of operations using the UH-60A BLACK HAWK helicopter to tactically deploy lightweight squad carriers. Surrogate test vehicles are being used. If this method of operations proves viable, the Army could opt to procure a much lighter weight squad carrier from another source. Candidate squad carrier vehicles in the joint LAV program are too heavy for BLACK HAWK lift.

NEW STARTS/RESTARTS

QUESTION: Mr. Secretary, there are a number of new starts and restarts in the Army R&D budget. Some of these include:

- High-to-medium Air Defense Development ($27.2 million)
- Advanced Rocket Control System ($27.9 million)
- RATTLER (a medium range anti-tank missile ($17.9 million)
- Battlefield Data Systems ($27.9 million)

Can any of these new starts be slowed or deferred without significantly impairing the long-term U.S. Army modernization effort?

ANSWER: High-to-medium Air Defense Development. The impacts of delaying or deferring this FY83 New Start are as follows: Delaying the start of this program until 1984 will add an estimated $30 million to the total program cost. A tactical missile threat already exists for which there is no existing defense. Delaying the start will cause a corresponding delay in fielding a capability to counter this threat. The Defense Science Board and OSD have indicated the urgent need to accelerate this development effort.

Advanced Rocket Control System. This classified special access program is required to counter today's security threat. This program has already been deferred three years.

RATTLER. Deferring RATTLER would seriously impact the modernization of our future anti armor capability for the light Infantry and Rapid Deployment Forces. RATTLER is being developed to replace the DRAGON, which is out of production. DRAGON is (deleted).

Battlefield Data System. The Army is responding to Congressional guidance to seek a less-costly alternative to SOTAS. We will be ready to start on BDS in FY83. Another year's delay is unacceptable. Ground commanders need to be able to detect, locate and track ground moving targets deep in hostile territory. They need to be able to tell where and when to concentrate their combat power. This capability is critically needed if we are to fight outnumbered and win.

RATTLER

QUESTION: Rattler was formerly called Infantry Manportable Anti-Armor Assault Weapons System (IMAAWS). This system has been identified by the Army as "a must for tank fighting and other light infantry". Will Rattler incorporate the Tank Breaker technology that DARPA has worked on?

ANSWER: Possibly. DARPA's program is being closely coordinated with the Army to insure that the Tank Breaker technology development is consistent with the RATTLER program. The Tank Breaker "seeker" technology offers the potential for an extremely capable weapon. We intend to keep the RATTLER competition open to all applicable technologies, including Tank Breaker in the Request for Proposals. The Army will make a selection next spring based on an evaluation of the proposals.

CHEMICAL WARFARE CERTIFICATION

QUESTION: Mr. Secretary, on February 8 the President submitted to Congress the formal certification that the production of lethal binary chemical munitions is essential to the national interest. Can you outline the objectives and requirement of the binary munitions acquisition program?

ANSWER: The US chemical warfare (CW) policy is to eliminate the threat of chemical weapons use. Our strategy to achieve this end consists of two mutually supporting elements. First, we seek a complete and verifiable ban on chemical weapons development, production, and stockpiling. Secondly, pending the achievement of such a ban, we will seek to deter the use of chemical weapons against US and allied forces by denying an enemy a significant military advantage from chemical use. Such a deterrent requires having forces that can survive and carry on sustained military operations in a contaminated environment, and maintaining the capability to retaliate with chemical weapons.

In this regard, the objective of the retaliatory portion of the CW program is to replace the current deteriorating and logistically cumbersome agent stockpile of marginal military utility with one that is smaller, safer, more mobile, and militarily effective. Current plans are to produce two binary munitions, the 155mm GB-2 artillery round and the BIGEYE VX-2 aerial bomb, giving the capability to attack both front line and rear echelon targets. The planned binary production quantities through FY 1987 are approximately (deleted) estimate. Requirements for additional production of these or any other chemical munitions depend on the outcome of arms control efforts and continuing evaluation of military needs.

CHEMICAL WARFARE CERTIFICATION

QUESTION: What are the overall costs for the program, and how much would be financed in the FY 1983 budget?

ANSWER: In support of the binary chemical modernization program, the DoD FY83 Budget Request includes $104.3 million for tooling and initial production of binary munitions (155mm GB-2 projectiles and Navy/Air Force BIGEYE VX-2 bombs), construction of a load and packout facility at Pine Bluff Arsenal, Arkansas for BIGEYE, and retaliatory R&D. Funding by Service is:

Procurement 155mm GB-2 Projectiles (Army)	$ 18.4M
Navy/Air Force BIGEYE VX-2 Bomb	
MILCON (Army)	$ 18.3M
Industrial Base for QL (Army)	$ 10.0M
Bomb Tooling and Hardware (Navy)	$ 26.0M
Research and Development	
Army	$ 23.5M
Navy	$ 8.1M
TOTAL	$104.3M

The current binary modernization program involves only the 155mm GB-2 artillery projectile and the BIGEYE VX-2 bomb. In this regard, the only additional funds that would be needed for Government facilities within the next five years, would be (deleted) to procure equipment for the BIGEYE load and packout facility.

The planned and projected production quantities of 155mm and BIGEYE binary munitions, and their associated procurement costs through FY 1987 are:

155mm	(deleted)
BIGEYE	(deleted)

REMOTELY PILOTED VEHICLES

QUESTION: Mr. Secretary, last year the Department cut the RPV R&D program in half during the September budget reduction. Congress put this money back into the program in December. In a February 26th report, the GAO stated the RPV's show significant promise, but need a stable funding profile. In particular GAO, recommends that "... if RPV progress is such that it does not command high sustained funding, consideration be given to discontinuing the program or reorienting it to a low level research and development program." Do you agree? How high of a priority is the RPV program this year?

ANSWER: The Army's Remotely Piloted Vehicle (RPV) program will provide a needed capability to detect and engage targets beyond line-of-sight as well as providing the Division and Brigade a battlefield reconnaissance capability. This program, although given high priority, must compete for funds with programs having equal or higher priority. RPV will continue to receive the highest sustained funding possible but competing priorities may not assure it a stable funding profile. The RPV program is ranked in the top 20 percent of tactical Army programs in FY83.

Joint Services Rotary Wing Aircraft Development (JVX)

QUESTION: The JVX program is budgeted for $49.8 million in FY 1983. This is another new start. The program is estimated to cost $77.3 million in FY 1984. Costs beyond FY 1984 have not been determined, but you have set an IOC for FY 1992. How can you be sure you can meet that IOC when you don't know how much money the program will require beyond FY 1984?

ANSWER: Because a JVX program plan has not been solidified, it is somewhat premature to categorically state when the IOC can be achieved. However, our initial estimates do indicate a Fiscal Year 1992 IOC is both feasible and realistic. Concerning JVX program cost beyond Fiscal Year 1984, preliminary estimates remain unsubstantiated. However, an on-going joint services technical assessment group is studying concept feasibility and conducting cost versus performance trade-offs. They are scheduled to complete their analysis in late spring/early summer. With the outcome of this group, we should have a relatively accurate fix on costs by mid summer.

BATTLEFIELD DATA SYSTEMS

QUESTION: The Army has requested $27.9 million for a new start, Battlefield Data Systems, which is the replacement for the canceled SOTAS program. Has the Army developed a complete system definition for this program, so that we can be sure all of the funds will be spent efficiently in FY 1983?

ANSWER: The Army is now working with OSD, DARPA, Navy and the Air Force in a Joint Task effort to explore the feasibility of developing a combined Army/ Air Force radar program. Further work is necessary to precisely define the program but the concept entails the development of a single, core radar with modular elements applicable for both Army and Air Force use on the OV-1D and the TR-1. The necessary interfaces, including data links, processing capacity and display equipment, would be developed following the same common core philosophy used for the radar. There are issues that need further study but we anticipate these studies will be completed before the end of FY82 to allow initiation of hardware developments in FY83.

BATTLEFIELD DATA SYSTEMS

QUESTION: Why are the Army and Air Force still developing separate intelligence surveillance and targeting systems? Could not this responsibility be turned over to the Air Force?

ANSWER: The Army and Air Force are working together to explore the feasibility of developing a common modular surveillance and target acquisition radar with the necessary interfaces for receipt of downlinked data at all echelons. This effort is an attempt to slow radar proliferation while achieving maximum commonality between Army and Air Force systems. Basic differences exist in Service radar requirements. The Army needs a capability for wide area surveillance and target classification; Air Force needs weapons guidance and aircraft vectoring capabilities. This joint effort will determine if the two requirements can be satisfied by a single radar system.

QUESTION: The FY 1983 budget request is based upon development of ground station and data link hardware and software, and adapting an existing sensor and platform (The Blackhawk helicopter). Which sub-system development program presents the highest risk--the data link or the ground station?

ANSWER: If we build upon the technology developed for SOTAS, the risk for both should be low. Working prototypes for a Cubic data link and the ground station had been built and demonstrated before SOTAS was terminated. The data link prototype is now being evaluated in DOD-sponsored tests. Approximately ninety-percent of the ground station software design had been completed and several basic functions had been demonstrated.

QUESTION: Contractors have not been selected for the BDS program, but the Committee understands that the Army's Harry Diamond Laboratory has been tasked to redesign the ground control stations. Why didn't you go to a private firm?

ANSWER: No final decision regarding division of effort between contractors and laboratories has been made. The Army's reviews have explored alternative ways to manage the development. Doing some of the software development in-house is being considered because development of in-house expertise in this area would facilitate support of the complete software package and the execution of later product improvements.

QUESTION: Could we get off to a reasonable start on this program with less than $27.9 million? What kinds of tasks could be performed at a $5 million or $10 million level?

ANSWER: Regardless of the outcome of our FY 1982 reviews, the first year is critical to setting the pace for the program. Any development program must include both direct development of hardware and concurrent study efforts to develop supporting documentation.

A $5 million dollar effort would not permit any substantive development to be done. A $10 million dollar effort would permit only a minimal development effort on ground station software. Cuts of this magnitude would essentially delay the development and fielding of this critically-needed capability by another year.

MILITARY PERSONNEL

QUESTION: The Active Army strength was 787,400 as of January 1982. Yet, the FY 1982 authorized end strength is 780,300 and the FY 1983 budget request of $14.4 billion is for 783,800 personnel. Why is this?

ANSWER: The Army has submitted a supplemental request with the FY 83 budget to increase the FY 82 end strength from 780,300 to 784,400. This increased end strength is needed to restore a brigade whose planned inactivation was overruled during final budget review. Currently, the Army is ahead of schedule toward achieving the overall FY 82 recruiting goal. Also, a combination of high unemployment levels and the perception that military compensation will approach comparability with the civilian sector has caused the retention (reenlistments) of Active Army soldiers to be above expectations. The Army has evaluated and is implementing policy changes designed to constrain the FY 82 end strength to the 784,400 level and, at the same time, provide for manning of the active force with more competent soldiers.

QUESTION: We understand the Army was unable to keep category IV (lowest acceptable mental category) at 25 percent or less of total recruitment. In FY 1983 this maximum is reduced 20 percent. Will the Army be able to recruit within these limitations?

ANSWER: Yes.

QUESTION: The FY 1982 DOD Appropriations Bill funded one-half the request for the Skill Qualifications Test (SQT) ($9 million) because of concerns over its effectiveness. The FY 1983 budget request for this program is back up to $18.3 million. Why should the test be continued? Is it really effective?

ANSWER: SQT is an effective program, and it is vital to individual and unit training readiness. At supervisor and commander level, the assessment of soldiers against performance standards (not always in a formal setting) tells the commander what additional training is needed. It also helps eliminate duplicative training in skills that most people demonstrate they already know how to do. Unless a commander knows where his soldiers stand in their individual proficiency, he can waste a lot of time and other resources doing collective training the unit is not ready for. For example, if radio operators cannot encode and decode messages, squad leaders cannot read maps, or if a tank gunner cannot properly range to a target, there would be little point in conducting certain team or unit exercises. The Soldier's Manual-SQT concept permits commanders to make those kind of assessments in a very direct way. It also provides the Army with the necessary data to promote the most qualified soldiers.

SQT impact on individual combat readiness has been highly positive. In 1981, 89% of soldiers passed their SQT, a significant accomplishment. More important, however, SQT has been a strong stimulant in the development of well-managed individual training programs in units.

The chief limitation of the SQT program is the administrative work load associated with the distribution, scoring and reporting of tests and related products. The Army has studied the problem and is nearing a decision on measures to alleviate this administrative load while retaining the best features of the SQT program.

The $9 million funding limitation imposed by the Congress is having serious impact on the Army's ability to complete the current test cycle and begin the incorporation of changes. Without a reprograming action for FY 82 and a continuation of the full $18 million in FY 83, the Army may be forced to curtail or stop testing in mid-cycle and defer adoption of systemic changes. This would, in turn, impact on the personnel management system and deny the Army valuable objective data in the selection of the most qualified personnel for promotion. The Army will seek congressional authority to reprogram $9 million FY 82 dollars as soon as a decision is reached on changes to the program. The Army will provide the Congress a full briefing on the restructured system in April 1982.

QUESTION: The Army is introducing the regimental system concept for 11 company size units this year. Under this system, soldiers are trained together to promote unit cohesion and affinity. What is the FY 1983 cost of this program, and what portion of the Army is expected to change to the regimental system?

ANSWER: The Army is currently developing a comprehensive evaluation program, the purposes of which are to determine the optimal techniques for implementing and the risks associated with transitioning to a unit movement system. The total number of companies to be involved in FY 83 costs cannot be accurately fixed now. It is the goal to apply the regimental system to Infantry, Armor, and Cannon Field Artillery units initially. The development of a concept for broader application will follow.

INCREASE IN PCS MILEAGE

QUESTION: Congress has twice turned down requests for 16¢ mileage reimbursement because it has not been shown that auto operating costs actually exceed the current 13¢ allowance. Why the third request?

ANSWER: The Army's rationale is based on evaluation of data prepared by agencies outside the military, such as Runzheimer and Co. (one of the Nation's largest travel consultant firms), and the Department of Transportation. Runzheimer data are used by numerous federal agencies which include General Services Administration, Department of Defense, and Congressional Staff.

The table below reflects the current and proposed entitlements and justification for an increase to 16 cents per mile.

MONETARY ALLOWANCE IN LIEU OF TRANSPORTATION (MALT) INCREASE FOR MEMBER PCS TRAVEL

- Current Entitlement:
  - 13 cents per mile during PCS
- Proposed Entitlement:
  - 16 cents per mile

o Justification:

- -- GAO studies clearly establish need to increase current mileage entitlement

--- American Automobile Association estimates	24¢ per mile
--- General Services Administration estimates	20¢ per mile
--- Department of Transportation estimates	18.3¢ to 24¢ per mile
--- Runzheimer estimates (data used by GSA, DOD, and Congressional Staff)	20.04¢ per mile
-- Average cost of common carrier transportation to government is	16.5¢ per mile

Based on the above, it is apparent that providing 16 cents per mile during PCS is less than the lowest per mile cost shown above. In recognition of budgetary constraints, an increase of only 3 cents per mile is requested.

MILITARY PERSONNEL

QUESTION: Why should the military receive an 8 percent pay raise at a time when federal civilians are capped at 5 percent?

ANSWER: The proposed 8% military pay increase represents the Administration's forecast of private sector wage growth in the labor market where we compete for quality and quantity of personnel needed to man the force. A military pay increase of anything less than the projected cost-of-living increase in the private sector represents a pay cap. The effect of military pay caps has been well documented. A series of such actions in the mid and late 1970s resulted in military pay lagging considerably behind the private sector. That gap was a prime factor in the enlistment and retention problems experienced by the Army. Congress recognized the situation in 1980 and 1981 by overriding the Rivers Amendment of 1967, which states that military pay must be increased an equal amount anytime Federal civilian pay increases. The combined military pay increases for both years averaged 25%, regaining rough comparability with the private sector. Although general economic conditions in the private sector should not be overlooked, recent successes in enlistments and reenlistments can be attributed in part to compensation improvements. To accept what is in effect a pay cap, after finally achieving rough comparability is a step backwards.

In sum, the Army is opposed to any concept that would reduce annual military cost-of-living adjustments below that of the private sector. Such a concept is regressive to recent military compensation improvements, establishes an unhealthy precedent, is inequitable to the average soldier, and sends a message to the force that the much heralded "comparability" gains were only temporary measures.

QUESTION: How does the actual medical readiness of our forces compare with the wartime requirements? What initiatives in the FY 1983 budget will enhance our medical readiness?

ANSWER: Based on a recent capability analysis, the Army cannot totally support current wartime theater evacuation requirements, primarily because of force structure and equipment shortfalls. Initiatives programmed in the FY 1983 budget will:

o Begin to increase the number of medical units in the force, to include activation of an Evacuation Hospital forward deployed in Europe.

o Begin to realize increases to, and modernization of field medical equipment assemblages, including increases in prepositioned medical equipment (POMCUS) in Europe.

QUESTIONS SUBMITTED BY SENATOR STENNIS

National Guard Equipment

QUESTION: Mr. Secretary, the fiscal year 1982 Defense Appropriation Act included a separate appropriation for procurement of National Guard equipment. The fiscal year 1983 request does not include funds for this appropriation. Why is this?

ANSWER: The Army chose not to continue funding the separate procurement of National Guard Equipment appropriation beyond FY82 because of the extensive impact of the fiscal and administrative procedures required throughout the procurement system to maintain separate management and accounting of these funds. Having accomplished considerable progress in recent years toward efficiencies and economies in procurement administration, we believe that retention of the Army procurement appropriation structure will best allow continuation towards this end.

Although no funds have been specifically earmarked for either the National Guard or Army Reserve, both Reserve Components will realize additional equipment from direct distribution of new procurement and from redistribution of items from higher priority Active and Reserve component units based on total force distribution priorities at the time FY83 procurements are delivered. The Army is currently developing initiatives which will result in assignment of higher priority missions to the Reserve Components, wherever practicable. Consequently, higher priorities for equipment distribution, commensurate with these new priorities, will be assigned to the Reserve Components. Examples of higher priority missions in process of being considered are the Rapid Deployment Force and expansion of the Round-Out unit program.

QUESTION. There has long been a concern that the Active forces were modernizing at a much accelerated pace over that of the Reserve forces, including the Army National Guard and the Army Reserve. If we are going to commit these forces in the event of mobilization, then they must have adequate equipment with which to train. Don't you believe that many Army Reserve and Army National Guard units are ill-equipped for the missions they are to perform?

ANSWER. There are many units in the Army, both in the Active and in the Reserve Components, which are not equipped as we would like them to be, that is, filled to 100 percent of the wartime requirements with equipment of the most modern types. But that condition is a fact of life for the Army and will remain so for the foreseeable future.

The Army priority system for distribution of scarce resources is based on the sequence in which a unit is expected to enter combat and not on the component of the unit. That policy is sound. Those who will fight first receive the newest equipment and the highest level of fill. Those who will deploy and fight later are issued older equipment. But the peacetime condition of these later deploying units is not the way they will go to war. Before they deploy, they will receive additional personnel, training, and equipment.

There are also some units, primarily in the Reserve Components, which need modern equipment in peacetime to train for their wartime missions. Such requirements are recognized for fill ahead of normal sequence when necessary.

All competing requirements, including many which I have not mentioned, must be considered in arriving at distribution schemes for the Total Army. More importantly the Total Army requirements, Active and Reserve Components, are the basis for calculation of the Army Acquisition Objective which drives the development of the procurement request.

QUESTION: Will the $50 million appropriated for Army National Guard equipment be obligated in a timely manner?

ANSWER: The contract for the M109A2 155-millimeter howitzer is scheduled for award on 31 March 1982. The Army plans to award contracts for the M577A2 Command Post Carrier and the M125A2 81-millimeter Mortar Carrier in May of 1982. The contract award for the Armored Vehicle Launch Bridge (AVLB) will be made by 31 July 1983. This scheduled award date is paced by the engineering work required to use M60A2 Chassis in storage at Anniston for the AVLB program.

M1 TANK

QUESTION: The fiscal year 1982 supplemental request includes funds to stockpile additional components of the turbine engine and fire control system for the M1 tank. This is to allow for a "surge' in production of these tanks if necessary. The General Accounting Office recently testified concerning the risk of building up an inventory of M1 tanks whose power train components may need frequent maintenance or replacement. Isn't it possible we are setting up an opportunity where either an expensive maintenance or modification program will be required?

ANSWER: The funds being requested in the FY 1982 supplemental appropriation will buy long lead time components of the engine and fire control systems. The Army does not anticipate stockpiling any components subject to modification or shelf obsolescence.

QUESTION: The current schedule calls for going from a 30-tanks-per-month production rate to 60 per month in November to 90 tanks per month in February 1985. How would you assess the risk involved in stepping up the production rate of the M1 tank at this point?

ANSWER: The Army has accepted a moderate risk in the interest of achieving production maturation and getting this urgently needed system into the field. The projected schedule is attainable within acceptable risks. It must be emphasized we have insisted on greatly improved quality as we increase the production rate. There will be no relaxation in this effort.

Pershing II

QUESTION: There have been some difficulties in completing the development of the Pershing II missile. This system was to be the centerpiece of NATO's nuclear modernization program with initial deployment scheduled for December 1983. Just how far behind the deployment schedule are we?

ANSWER: The production and deployment program are on schedule to meet the programmed IOC of December 1983. We initiated long lead procurement December 31, 1981, on schedule, and fully expect to begin full production in July 1982 as planned to meet the IOC. The development program is currently approximately four weeks behind schedule due to late availability of prototype hardware, caused by manufacturing delays. However, this schedule slip has no impact on the production program. We expect to have the development program back on schedule this year.

QUESTION: The production decision date is late June 1982. Will we make this date?

ANSWER: Yes, we will. Based on a recent Army proposal and the current progress of the program, OSD has agreed that we will begin production in June 1982. As a part of this agreement, the ASARC/DSARC III review has been rescheduled for October/November 1982. This review will be a production continuation review of the program in consideration of the results of testing at that time.

QUESTION: Do you believe adequate testing has been done to allow for a production decision?

ANSWER: Yes, we do. Prior to beginning production in June 1982, we will have the results of the first flight test. This is a maximum range flight, which we consider to be the highest risk test. More importantly, we will have completed about 30 per cent of the subsystem and component testing and should know if any serious problems exist. As we obtain more test data, and before significant production funds have been obligated, we will conduct a production continuation ASARC/DSARC III review.

QUESTION: What precipitated the decision to reduce the number of scheduled tests from 28 to 18?

ANSWER: The decision to reduce the number of scheduled flight tests from 28 to 18 resulted from a Special ASARC in December 1981. The purpose of the decision was to modify the test program to address as many operational issues as early as possible in the test program in order to minimize the production decision risk. The achievement of this goal resulted in an integrated test program which combined the user and developer testing. This combination of tests made 10 of the originally scheduled missile flights unnecessary.

QUESTION: Will the missile have been tested at its full operational capability range prior to a production decision date?

ANSWER: The first missile flight is a maximum range flight from Cape Canaveral, which will provide the maximum heat stress and dynamic pressure. This flight is scheduled for (deleted). We will begin production subsequent to this flight. It should be noted that due to instrumentation requirements this missile will weigh approximately 400 pounds more than the tactical missiles and hence will not fly to the maximum tactical PERSHING II range. However, the flight trajectory will be modified to provide the dynamic pressure and heating which the tactical missiles will experience at maximum range.

Armored Combat Earthmover

QUESTION: There appear to be continued problems and cost growth with procurement of the Armored Combat Earthmover (ACE) which is designed to assist the M1 tank in combat. What can you tell us about this?

ANSWER: There have been no continued problems. There has been no cost growth in the hardware cost since the FY 82 Budget Request was submitted. That unit cost is still expected to be approximately $1.0 million or a total of about $25 million for hardware of the $40.4 million appropriated.

The acquisition strategy, however, has been revised to make significant improvements to the program. The initial production quantity has been reduced from 87 to 25. The planned award of the competed multi-year production contract has been accelerated by one year from FY 85 to FY 84. The balance of the FY 82 funds will be used for incorporating improved technology, a RAM-D enhancement program and for improving and validating the Technical Data Package. This investment of funds up-front is designed to put the program under competition quicker, ensure a better production vehicle and hold the costs in production.

QUESTION: There was $40 million appropriated in fiscal year 1982 for the initial 36 units. Have any of these funds been obligated to date?

ANSWER: No, none of these funds have been obligated. However, contract negotiations are in process.

QUESTION: Senator Pryor has introduced a bill to rescind the $40 million appropriated for the ACE in fiscal year 1982. What would it do to your program if these funds were rescinded?

ANSWER: If the funds are rescinded, the ACE acquisition program as structured now would be destroyed. The initial production contract could not be awarded. No validated Technical Data Package could be obtained with which to compete the award of the planned multi-year production contract. In all likelihood, the rescission would result in our soldiers never having the equipment which can afford protection on the battlefield, and is capable of doing the tasks needed to support the fighting forces.

QUESTION: What are your plans for the future? The P-1 document does not reflect any procurement request for fiscal years 1983 or 1984.

ANSWER: The initial production contract will be executed with FY 82 appropriated dollars. In accordance with the revised acquisition strategy to accelerate the award of the competed multi-year production contract by a year from FY 85 to FY 84, no funds are requested in FY 83 and funds will be requested in FY 84.

QUESTION: The previous acquisition objective was 1300. Does this continue to be your goal?

ANSWER: The objective has always been to acquire approximately 1400. Previously, the strategy was to acquire 87 in the initial production contract and the balance in the competed multi-year production contract. Under the revised strategy, 25 will be acquired in the initial production contract and the balance in the competed multi-year production contract planned for award one year earlier in FY 84.

ARMORED COMBAT EARTHMOVER

QUESTION: There is some indication that the M1 tank could be modified with a blade to assist in "digging in" prior to combat. Is this a viable alternative to procurement of the ACE?

ANSWER: No, tanks equipped with blades are not a viable alternative to the M9.

Currently, one M60 tank per company is equipped with a blade. As M1 tanks are fielded blade kits will be provided, again on the basis of one per company. Any tank, even when fitted with a blade is still primarily a weapons system. Tanks equipped with blades are intended only for moving minor obstacles from roads or for minor earthmoving in loose soils.

The M9, on the other hand, is specifically designed for heavy digging and hauling. It has the speed and mobility to keep pace with the armored force and is designed to survive on the battlefield. Thus, the capabilities of the tank fitted with a blade and the M9 are not comparable.

QUESTION: The price of the ACE is now estimated to be $1.6 million per copy. Isn't this too much to pay for what is essentially a bulldozer? Do we have any other alternatives to perform this mission?

ANSWER: Yes, $1.6 million per copy for a bulldozer is too much. The unit hardware price for the initial quantity of 25 is approximately $1.0 million, an estimate that has not changed since the FY 82 budget request was submitted. In quantity production, the price is estimated to be $600,000 per copy in FY 82 dollars. The price of $1.6 million per copy quoted is misleading in that it includes the investment made up front for efforts in the initial production contract which are designed to ensure a better production vehicle, a strong competition for the multi-year production contract, and acceleration of that contract to FY 84, one year earlier than originally planned. Additionally, the ACE is not essentially a bulldozer. It has additional important capabilities; it can move at 30 mph and keep up with fighting forces; it can swim water obstacles; it can haul earth; it provides its operator protection from shrapnel and chemical agents. It is also air droppable. These capabilities are absolutely essential. All the bulldozer can do is move earth, which the ACE can also do.

No. There is no alternative to the ACE.

9mm Handgun

QUESTION: The Army recently announced the cancellation of procurement for a 9-millimeter handgun. This procurement was to replace the 45-caliber pistol which has not been procured for many years. The Army was to be the executive agent for this procurement. What will be done now to replace the 45-caliber pistol?

ANSWER: The Army, in conjunction with the other Services, has initiated efforts to reevaluate the Joint Service Operational Requirement and should conclude this effort in June 1982. Afterwards, a revised acquisition plan will be designed to obtain weapons which fully meet the military service requirements for a standardized 9mm pistol.

QUESTION: The Army cancellation announcement indicated that "the submitted weapon samples of all offerors had substantially failed to meet the essential requirements contained in the procurement solicitation." Would you expand upon this reason why the procurement was cancelled?

ANSWER: The Army, as executive agent, initiated the acquisition process on 29 June 1981 in response to the Joint Service Operational Requirement (JSOR) effective 10 June 1981. A comprehensive test program was completed on 29 January 1982 and normal source selection procedures were utilized to evaluate contractor proposals and testing results. The results of this thorough evaluation process revealed that the submitted weapon samples of all offerors had substantially failed to meet the essential requirements of the JSOR as contained in the procurement solicitation. Primary areas of failure were: Reliability, operation in adverse environment, and operation in adverse climatic conditions. In accordance with the Defense Acquisition Regulations, the Army cancelled the procurement action. OSD concurred with this action. A report addressing the testing of the 9mm handgun was forwarded to Congress on 1 March 1982.

M1 TANK

QUESTION: The GAO has recommended that production of the M1 tank should be held at a relatively low level pending improvements in the durability of the tank's power train.

I understand there are continuing problems with the transmission and the Army wants to improve the turbine engine. Would you comment on these issues?

ANSWER: No, there have not been continuing problems with the transmission. Developmental Test III and Operational Test III (DT/OT III) of initial production tanks clearly show that the transmission pattern failures experienced during full-scale engineering development prototype DT/OT II testing have been corrected in production M1's.

Yes, the Army wants to improve M1 power-train durability. There are two aspects of the Reliability, Availability, Maintainability-Durability (RAM-D) program. The first is to insure that power train (engine, transmission, final drives) pattern failures experienced during testing have been fixed in production vehicles and that the M1 power train will achieve its durability requirement of .5 probability of traveling 4000 miles without a power train component failure. The assessed power-train durability now stands at .37 probability and is expected by the Army and an independent Blue Ribbon Panel to meet or exceed the .5 requirement with March 1982 production M1 tanks. A power-train durability demonstration test will be run from May 82-May 83 to verify the fixes.

The second effort is to realize the potential for further RAM-D growth and achieve levels of RAM-D beyond those specified as requirements for the M1. Since the M1 tank has already exceeded its system and combat reliability requirements, the major thrust of these efforts is to reduce the operation and support costs associated with frequency of power train repair and replacement.

AIR DEFENSE WEAPON

QUESTION: What are your plans for providing a low-level air defense weapon for the Rapid Deployment Force? Both the RAPIER and the ROLAND have been mentioned as potential candidates.

ANSWER: Air defense coverage for the Rapid Deployment Force (RDF) is provided by organic air defense units assigned to the RDF organizations. The weapons include VULCAN, both towed and self-propelled, CHAPARRAL and REDEYE (will be replaced by STINGER). These air defense units provide direct support to their parent organizations. In addition there are currently (deleted). In FY84, the Army is planning to add one ROLAND battalion to the RDF for additional low altitude coverage.

CIVILIAN TECHNICIAN PROGRAM

QUESTION: The Army is preparing to implement a plan to replace civilian technicians in Army Reserve units with full-time military personnel. Why is this being done?

ANSWER: No decision has been made on any further US Army Reserve replacement of civilian technicians with military personnel. The Army is considering a recommendation that would convert about 3600 unit level US Army Reserve technician positions to military positions over a five year period beginning with FY 1984. Reasons given for this proposal include clarification of military command and control, one rather than two personnel systems to administer, and problems of the technician program that detract from unit readiness. Authoritative studies have found up to sixty-five percent of US Army Reserve technicians are not totally viable mobilization assets because of loss of military status or incompatible civilian and military grades or assignments.

QUESTION: Isn't it true that when a civilian technician is replaced with full-time military personnel it often requires more than a direct one-for-one replacement?

ANSWER: No. All replacements have been on a one-for-one basis. Nonetheless, additional active duty military personnel placed in certain high priority units during the past three years to improve the readiness of these units have been incorrectly preceived by some as replacement of technicians on more than a one-for-one basis.

QUESTION: Isn't it true that conversion to full-time military personnel will be implemented at a substantial cost increase above the civilian technician program?

ANSWER: We do not believe that active duty military personnel cost substantially more than civilian technicians. A December 1980, Office, Secretary of Defense report to Congress found the difference in costs for civilian technicians and active duty personnel insignificant based on pay and allowance rates in effect at that time. For one thing, technicians get both their civilian salary and military pay during annual active duty for training, usually two weeks.

QUESTION: I was provided a comparison of the annual salary of a GS-6 civilian technician who was offered the opportunity to convert to a three-year contract in his present job. His Reserve rank is Master Sergeant (E-8) and, with quarters, Variable Housing Allowance, and rations, his annual compensation by converting to the full-time military position would be over $7,000 more than his current civilian salary. Even worse, about $8000 of his benefits, if he were to convert, would be tax free. How can we justify this example? There are apparently many more positions in a similar situation.

ANSWER: Replacement of a GS-6 technician by a Master Sergeant, E-8 is the exception rather than the norm. For example, the 1639 US Army Reserve conversions made to date include 282 GS-6 positions, but only 48 E-8 positions. Neither does the cited case take into account the costs of civilian employee fringe benefits and costs of the dual civilain and military retirement benefits which are a part of the technician program.

QUESTION: Do you believe the personnel occupying the full-time military positions will do a better job for the Army than the civilian technician? Why?

ANSWER: Our evaluation of military replacements brought on duty through June 1980 found the skills and performance levels of these personnel comparable to those of the technicians which they replaced. This is not surprising since both categories of personnel are usually recruited from the Selected Reserve. The primary benefits to be realized is the consistency of having military personnel in military units. In the case of the US Army Reserve this will increase the assured number of viable mobilization assets through replacement of technicians without military status with military personnel.

QUESTION: Since 1970, civilian technicians have had to be members of the Army Reserve unit that they were employed by. Isn't this the best way to assure unit integrity in the event of mobilization?

ANSWER: No. The agreement "grandfathers" technicians employed prior to 1970 and contains no provisions for removing those technicians from the program who lose military status for reasons outside their control. A 1978 study found that up to sixty-five percent of US Army Reserve Technicians were not totally viable mobilization assets because of loss of military status or incompatible civilian and military grades or assignments.

QUESTION: Have the full-time military personnel that replaced civilian technicians been incorporated in the unit documents of Army Reserve organizations? If they have not been, why not?

ANSWER: No. Full-time personnel are now carried on a separate augmentation manning document to prevent them from blocking the career progression of part-time members of the selected reserve. They are attached to the units they support.

QUESTION: Isn't it true that conversion to full-time military manning of Army Reserve units leads to duplication of effort? In other words, there is an Army Reservist occupying the same position on a unit manning document which a full-time military technician occupies during the normal 40-hour work week.

ANSWER: Unit full-time support now amounts to about four percent of structure strength. Duplication on an individual basis can occur when both full-time personnel and part-time members of the selected Reserve attend weekend training assemblies. It does not occur in an overall sense, however, as the part-time paid drill strength has historically been more than four percent below structure strength. Alternative methods to prevent individual duplication are being considered. Both full-time and part-time personnel mobilize with their supported units, and deploy with these units unless unforseen circumstances dictate that they should deploy with other units. In that instance, the priority will be to assign them to similar units in need of their expertise.

ALTERNATIVE TO VIPER

QUESTION: Where do we stand on the test program for alternative anti-armor weapons to the VIPER? When will the findings be available?

ANSWER: The Army, with OSD (USDRE) participation, has established a three phase program to comply with Congressional language and Army requirements. Phase I of the program is in progress; screening criteria are being established, with advertisement (in Commerce Business Daily) no later than 15 May 82, at which time Phase II begins. The Army will be ready to test by 1 Aug 82 (77 days following advertisement, within the 90 day requirement in the Congressional language). Participating contractors will also be asked to provide a schedule and fixed proposal for rounds to be purchased for Phase III, and proposals for quantity production, costs, and facilitization. These will be validated by OSD Cost Analysis Improvement Group and Product Engineering Services Group. All Phase II testing will be completed by 31 July 1983. Results of tests will be reported to Congress within 60 days following completion of individual tests. Following test results report, a Joint IPR (Army/USMC) will be held to determine which candidate systems meet requirements for combat effectiveness, costs, and production capability, and which therefore, will be participating in Phase III, consisting of Operational and further Developmental Testing (DT/ORII), leading to an IPR for type classification and production decision.

Light Antitank Weapon

QUESTION: The Light Antitank Weapon (LAW) is undergoing a product-improvement program to improve its capability. Does this program continue to show promise?

ANSWER: The improvement to the M72 series LAW is being done by a consortium consisting of Norris Industries, Talley Industries, TRACOR MBA, and A/S Raufoss. The proposal promises increased performance in the areas of velocity, penetration, and probability of hit. The program has been initiated in Norway, and the current schedule provides for rounds to be made available for U. S. testing in May 1983. This LAW is called the M72-750, and it will be evaluated when rounds are made available.

EXTENDED TRAINING PERIOD

QUESTION: The General Accounting Office has questioned whether the additional week of basic training (seven to eight weeks) will provide an improved soldier. Just what improvements do you foresee coming from the additional week?

ANSWER: The objective of the extended training program is to improve further the quality of training soldiers in the training base receive before being transferred to their initial assignment in the Army. The primary objective of Basic Training is to transition a civilian into a physically tough, disciplined soldier proficient in the tasks needed to survive in combat upon arrival in his first unit of assignment. The one week extension provides positive momentum to achieving this goal by helping soldiers understand better their role in the Army and reinforcing this role through the soldierization process. The extension increases the emphasis on basic rifle marksmanship, communications, map reading, nuclear, biological and chemical survivability training and physical fitness.

QUESTION: I understand there was some limited testing completed prior to initiation of the extended training period. What were your findings during the testing?

ANSWER: The extended basic training program was first implemented by TRADOC on a trial basis in January 1981 at Fort Knox and Fort Leonard Wood. Initial assessments of the extended program revealed that it produced a better trained soldier. Rifle marksmanship qualification scores, end of cycle test results and physical fitness tests indicated that training was tougher and standards raised. In addition to the benefits of the added training, each soldier gained an additional week of exposure to the soldierization process.

QUESTION: What is the annual cost of the additional week of training?

ANSWER: The annual cost of the additional week of training is approximately $21 million. This includes about $5 million in operation and maintenance funds and about $16 million in Reserve Component soldier pay.

QUESTION. Are you satisfied that an adequate number of instructors and cadre are available to accommodate the extended period of training?

ANSWER. Yes, an adequate number of instructors and cadre personnel were provided to the Training and Doctrine Command to accommodate the extended period of training. The FY 1983 budget submission provides additional force structure resources for expanded inital entry training for all enlisted soldiers begun in FY 82. In addition the Army will provide 100% of fill of Drill Sergeant authorizations to the training base by the end of the 1st Quarter FY 1983. However, a recently completed review of the entire training base indicates trainer shortages in other areas of individual training as well as manpower shortages in base operations support. The Army is providing resources to reduce this shortfall in FY 1984.

LIGHT TANK

QUESTION: General Meyer, you mentioned the need for light forces as well as heavy forces. In this regard, how are we doing with development efforts for a light tank?

ANSWER: This effort will be a joint developmental program which we have named the Mobile Protected Gun System. The Army and the Marine Corps signed a Memorandum of Agreement on 16 December 1981 to formally establish this program. The program is currently in the Concept Exploration Phase and uses as a basis data gained from the joint, four year Armored Combat Vehicle Technology Program. Both Services agree that the 75mm hypervelocity, automatic cannon is a candidate weapon system for the new combat vehicle. A Joint Program Manager's office is being established at the Tank Automotive Command Headquarters in Warren, Michigan. The Program Manager, through participation of both Services, will develop documents covering Integrated Logistics Support requirements, a program acquisition plan and a Joint Statement of Requirements (JSOR) for the Mobile Protected Gun System. We are planning to enter the Concept Validation and Demonstration Phase starting in FY 1983. At that time we would award competitive contracts to have contractors build prototypes of the future system. A successful R&D program would allow fielding of the new system in the 1988 timeframe.

SUBCOMMITTEE RECESS

Senator **RUDMAN**. The subcommittee stands in recess until Thursday, the 25th, at 9, when we will hear testimony from the Department of the Navy.

[Whereupon, at 11:05 a.m., Tuesday, March 23, the subcommittee was recessed, to reconvene at 9 a.m., Thursday, March 25.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1983

THURSDAY, MARCH 25, 1982

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:08 a.m. in room 1224, Everett McKinley Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Kasten, Rudman, and Stennis.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE NAVY

STATEMENT OF HON. JOHN F. LEHMAN, JR., SECRETARY OF THE NAVY

BUDGET REQUEST

Senator STEVENS. Good morning, Mr. Secretary, General, Admiral.

This is an overview of the Navy Department's budget request for fiscal year 1983. That request totals some $86 billion in new budget authority, an increase of more than $20 billion over appropriations to date for fiscal year 1982—that is an increase of more than 30 percent. Of this total, $80.7 billion is for the Navy and $7.3 billion for the Marine Corps.

The Navy also has a $746 million program supplemental request pending and we expect the administration to submit a pay supplemental of $1.7 billion in the reasonably near future.

Outlays under the fiscal year 1983 budget request would total $66.6 billion; that is an increase of $10.9 billion or nearly 20 percent over the current year if enactment of the pending program supplemental is included.

We are going to try and see what this amounts to in terms of real growth—particularly growth in the shipbuilding area—as we get into testimony from the witnesses today. There is a tremendous surge in funding proposed for the Navy, and we hope the witnesses today will devote considerable attention to giving us the justification on the record for that proposed increase.

COMPARATIVE TABLE

I do want to ask the Navy to supply for the hearing record at this point a table comparing fiscal year 1983 in terms of both budget authority and outlays with the appropriations to date for the current year. The table we request should separately include the pending program supplemental for fiscal year 1982 as well as the pay supplemental that we understand will be presented later. I would ask that the table display funding in the appropriation account level and changes in both dollars and percentages.

[The information follows:]

DEPARTMENT OF THE NAVY
TOTAL OBLIGATIONAL AUTHORITY
FY 1982 AND FY 1983
(In Thousands of Dollars)

	FY 1982 Approp.	Program Supplemental	Pay Supplemental	FY 1982 Revised Est.	FY 1983 Request	FY 1982 - 1983 Change $	FY 1982 - 1983 Change %
MPN	9,117,956	154,200	1,073,144	10,345,300	10,578,900	233,600	+2.3
MPMC	2,766,966	50,700	316,634	3,134,300	3,276,100	141,800	+4.5
RPN	346,670	-	28,230	374,900	641,300	266,400	+71.1
RPMC	138,720	2,800	12,880	154,400	165,900	11,500	+7.4
O&MN	19,359,489	229,100	238,400	19,826,989	22,165,800	2,338,811	+11.8
O&MMC	1,178,740	25,300	12,700	1,216,740	1,481,800	265,060	+21.8
O&MNR	570,940	200	3,247	574,387	653,000	78,613	+13.7
O&MMCR	40,299	-	145	40,444	48,415	7,971	+19.7
APN	9,140,000	-	-	9,140,000	11,582,300	2,442,300	+26.7
WPN	3,215,100	-	-	3,215,100	3,901,600	686,500	+21.4
SCN	8,638,900	263,400	-	8,902,300	18,648,300	9,746,000	+109.5
OPN	3,676,577	-	-	3,676,577	3,970,156	293,579	+8.0
PMC	1,711,456	20,000	-	1,731,456	2,300,700	569,244	+32.9
RDT&EN	5,807,131	-	-	5,807,131	6,232,300	425,169	+7.3
NSF	9,435	-	-	9,435	354,372	344,937	+3,655.9
MCSF	13,334	-	-	13,334	11,812	-1,522	-11.4
DoD Appn Req.	65,731,713			68,162,793	86,012,755	17,849,962	+26.2
MCON	1,451,393	-	-	1,451,393	1,208,300	-243,093	-16.7
MCNR	36,000	-	-	36,000	25,200	-10,800	-30.0
FHN&MC	(592,167)	-	-	(592,167)	776,000	776,000	NA
Total Appn Req.	67,219,106	745,700	1,685,380	69,650,186	88,022,255	18,372,069	+26.4

(In Thousands of Dollars)

	FY 1982 Approp.	Program Supplemental	Pay Supplemental	FY 1982 Revised Est.	FY 1983 Request	FY 1982 - 1983 Change	
						$	%
MPN	9,117,956	154,200	1,073,144	10,345,300	10,578,900	233,600	+2.3
MPMC	2,766,966	50,700	316,634	3,134,300	3,276,100	141,800	+4.5
RPN	346,670	-	28,230	374,900	641,300	266,400	+71.1
RPMC	138,720	2,800	12,880	154,400	165,900	11,500	+7.4
O&MN	19,359,489	229,100	238,400	19,826,989	22,165,800	2,338,811	+11.8
O&MMC	1,178,740	25,300	12,700	1,216,740	1,481,800	265,060	+21.8
O&MNR	570,940	200	3,247	574,387	653,000	78,613	+13.7
O&MMCR	40,299	-	145	40,444	48,415	7,971	+19.7
APN	9,140,000	-	-	9,140,000	11,582,300	2,442,300	+26.7
WPN	3,215,100	-	-	3,215,100	3,901,600	686,500	+21.4
SCN	8,638,900	607,121	-	9,246,021	18,648,300	9,402,279	+101.7
OPN	3,676,577	-	-	3,676,577	3,970,156	293,579	+8.0
PMC	1,711,456	20,000	-	1,731,456	2,300,700	569,244	+32.9
RDT&EN	5,844,357	-37,226	-	5,807,131	6,232,300	425,169	+7.3
NSF	9,435	-	-	9,435	354,372	344,937	+3,655.9
MCSF	13,334	-	-	13,334	11,812	-1,522	-11.4
DoD Appn Req.	65,768,939	1,052,195	1,685,380	68,506,514	86,012,755	17,506,241	+20.4
MCON	1,451,393	-	-	1,451,393	1,208,300	-243,093	-16.7
MCNR	36,000	-	-	36,000	25,200	-10,800	-30.0
FHN&MC	(592,167)	-	-	(592,167)	768,837	768,837	NA
Total Appn Req.	67,256,332	1,052,195	1,685,380	69,993,907	88,015,092	18,021,185	+25.7
Budget Concepts	-70,239	-	-	-70,239	-68,843	1,396	+2.0
TOTAL DON	67,186,093	1,052,195	1,685,380	69,923,668	87,946,249	18,022,581	+25.8

FY 1982 AND FY 1983 OUTLAYS*
(In Thousands of Dollars)

	FY 1982	Program Supplemental	Pay Supplemental	FY 1982 Revised Est.	FY 1983 Request	FY 1982 - 1983 Changes $	FY 1982 - 1983 Changes %
MPN	9,062,100	151,600	1,047,389	10,261,089	10,519,000	257,911	+2.5
MPMC	2,755,500	48,700	314,500	3,118,700	3,255,000	136,300	+ 4.4
RPN	339,300	-	24,575	363,875	601,200	237,325	+65.2
RPMC	132,800	2,400	10,835	146,035	158,500	12,465	+ 8.5
O&MN	18,433,300	189,900	165,926	18,789,126	21,219,500	2,430,374	+12.9
O&MMC	1,136,200	18,000	9,017	1,163,217	1,377,800	214,583	+18.4
O&MNR	554,870	130	2,175	557,175	617,700	60,525	+10.9
O&MMCR	34,300	-	93	34,393	43,300	8,907	+25.9
APN	5,657,500	-	-	5,657,500	7,819,600	2,162,100	+38.2
WPN	2,442,400	-	-	2,442,400	2,930,500	488,100	+20.0
SCN	5,386,000	28,300	-	5,414,300	6,295,000	880,700	+16.3
OPN	2,697,200	-	-	2,697,200	3,237,200	540,000	+20.0
PMC	423,600	1,000	-	424,600	851,000	426,400	+100.4
PAMN	15,000	-	-	15,000	10,000	-5,000	-33.3
RDT&EN	5,411,600	-	-	5,411,600	5,947,100	535,500	+ 9.9
NSF	75,900	-	-	75,900	191,600	115,700	+152.4
MCSF	29,500	-	-	29,500	14,700	-14,800	-50.2
DoD Appn Req	54,587,070	440,030	1,574,510	56,601,610	65,088,700	8,487,090	15.0
MCON	688,600	-	-	688,600	1,025,600	337,000	+48.9
MCNR	27,100	-	-	27,100	29,800	2,700	+10.0
FHN&MC					678,700	678,700	N/A
Tot Appn Req	55,302,770	440,030	1,574,510	57,317,310	66,822,800	9,505,490	16.6
Budget Concepts	-87,500	-	-	-87,500	-85,400	2,100	+2.4
Funds	69,404	-	-	69,404	-102,497	-171,901	-247.7
TOTAL DON	55,284,674	440,030	1,574,510	57,299,214	66,634,903	9,335,689	+16.3

* Includes outlays from prior year programs

SUMMARY OF JUSTIFICATIONS

Senator **Stevens**. Mr. Secretary, I am pleased to see you here today, Admiral Hayward, General Barrow, and Admiral Miller. We will put your statements in the record and ask you to proceed in any manner in which you wish.

Secretary **Lehman**. Thank you, Mr. Chairman. I would just like to briefly summarize the justification for the program that we have put forward.

It really begins with the commitments that this country has that are embodied in some 40 treaty relationships that tie us to what, presumably, are vital interests in all of the major areas of the world. These are treaty relationships with Japan, Australia, New Zealand, Korea in the Pacific, the NATO countries, the Organization of American States, and so forth.

SOVIET BLUE WATER FLEET

The major restoration of the Navy put forward by President Reagan is based on a recognition that while our Navy has shrunk to half its size in the past 10 years, the Soviets have for the first time now fielded, to mix a metaphor, a blue water fleet in each of the world's major oceans.

Whereas we used to speak and plan, as recently as the Panama Canal debates, of a swing strategy—to swing the fleet from one area to another—today, that is no longer possible. If we were to swing the Pacific fleet out of the Pacific to meet NATO contingencies, the State of Alaska, the city of Anchorage, only 2,000 miles from major fleet headquarters of the Soviet fleet, the oil resources of Alaska, the sealanes to Hawaii, to Japan——

Senator **Stevens**. You are getting my attention.

Secretary **Lehman**. Purely inadvertently, Mr. Chairman—would become the sole proprietorship of the Soviet fleet. There are now some 130 major ships permanently in the Soviet Pacific Fleet, including an aircraft carrier, with forward bases in Danang and Camranh Bay and elsewhere in the Pacific littoral. So, it is out of the question to "swing" the fleet out of the Pacific unless we are willing to write off all of those areas that I have listed previously.

Similarly, we have a new situation in the Caribbean with the buildup of Cuba. Cuba has been turned into a major block to our logistics pipeline necessary to meet any contingency. It sits athwart the sealanes out of the Gulf of Mexico with the Gulf ports providing over 50 percent of our logistics source in time of conflict in Europe and the Middle East, or wherever.

The Soviets have very prudently, from their point of view, built a force to interdict logistics pipline that with new submarines, Foxtrot submarines, new frigates, some 60 patrol boats, torpedo and missile boats, with modern interdiction strike aircraft and so forth. The threat has become a major maritime interdiction threat in the past 10 years. Therefore, the force structure we have is too small.

The President has put forward a budget and really this is, as you know, the third Reagan budget after the 1981 supplemental and the 1982 revision, and we are well on our way to a 30-percent expansion of the size of our fleet which we believe is the minimum necessary, 15 battle groups and 600 ships; 15 large-deck carriers, to meet those minimum commitments.

We believe that we have in the past 12 months demonstrated to Congress that this is not only utterly essential for the future and current security of the country, but is both affordable and, as the trendy phrase goes, "executable."

COST SAVINGS IN PROCUREMENT AREA

We have demonstrated, in the reform of the Navy's way of doing business in development and procurement, some real cost savings. We have produced tremendous and historic good news in personnel retention and recruiting in the Navy and Marine Corps, demonstrating to all the skeptics that this is a workable and an affordable program within the budget guidelines that you, Congress, have set for us in 1981 and 1982 and projected into the future.

As you know, we just submitted the Nunn amendment reports on programs that have overrun or exceeded guidelines in the last 3 months. Out of the hundreds of Navy and Marine procurement programs, we have only had to report two in that period that had real constant dollar unit cost increases, the 5-inch guided projectile which we have now canceled, and the AIM 7-M Sparrow. We think that is a record to be proud of.

SHIPBUILDING AHEAD OF SCHEDULE

We have demonstrated real savings in our shipbuilding program, our major investment account. Just to summarize some of the good news in shipbuilding, as you have seen it reported in the paper, we delivered the U.S.S. *Carl Vinson* to the Navy, and have gone to 13 deployable aircraft carriers almost 2 weeks ago at a savings to the taxpayer of more than $20 million and 34 days ahead of schedule.

On the 15 ships that were delivered in 1981, we have a total of $91 million savings and early delivery totaling 900 days ahead of schedule—that is a net ahead of schedule, not overrun.

To take one example, in our guided missile frigate program between February 1981 and March 1982 we delivered five frigates a total of 529 days early at a cost savings to the taxpayer of about $28 million.

In Seattle, the Lockheed Shipbuilding Construction Co. delivered a very large new submarine tender, the U.S.S. *McKee,* 30 days early at a savings of approximately $1 million.

The National Steel Shipbuilding Co. in San Diego delivered a very large destroyer tender, at a cost savings of $11 million.

The Ingalls Shipbuilding Co., in Pascagoula, delivered four *Kidd*-class destroyers this year at a cost savings to the taxpayer of nearly $50 million.

The Uniflite Corp. in Bellingham, Wash., delivered three utility boats between February 1981 and February 1982 a total of 330 days early under a firm fixed-price contract. The news is very good.

COST SAVINGS AND CANCELED PROGRAM

We will submit for the record a list of nearly $10 billion of cost savings and efficiencies that we have identified for the Navy under the Carlucci initiatives in the defensewide effort. We have canceled or reduced some 49 programs in the last 12 months that were nice to have but simply not affordable.

Senator **Stevens**. Will you submit those, too?

Secretary **Lehman**. We will submit a list of those for the record, Mr. Chairman.

[The information follows:]

DEPARTMENT OF THE NAVY
ECONOMIES & EFFICIENCIES
(TOA, $ MILLIONS)

LOWER COST ALTERNATIVES

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
AA-3	Boats & Crafts Radios	OPN	-	- 0.5	-	- 0.5
AA-4	VTX	RDT&E,N	-	- 7.6	- 3.3	-389.8
AA-5	Sub ASW SOW	RDT&E,N	-	-	- 9.0	-159.2
AA-6	ITSS	RDT&E,N	-	-12.6	-15.8	-110.0
AA-7	HXM	RDT&E,N	-	- 5.3	-13.1	-388.8
AA-8	U/S Surveillance	RDT&E,N	-7.8	-10.4	-16.7	- 71.0
AA-12	A-4 Ejection Seat	APN	-	-20.3	-19.6	- 39.9
AA-13	F/A-18 Government Furnished Equip.	APN	-	-	-	- 94.7
	TOTAL		-7.8	-56.7	-77.5	-1,253.9

PRODUCTIVITY ENHANCEMENT

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
AE-6	Productivity Enhancement		-	-	-	-
AE-7	MK-46 Mods Procurement	WPN	-	-	-7.9	-106.8
	TOTAL		-	-	-7.9	-106.8

LEGISLATIVE REFORMS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
AL	Davis-Bacon Act	MILCON	-	-30.3	-	-30.3
	TOTAL		-	-30.3	-	-30.3

MULTI-YEAR CONTRACTING

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
AM-7	NATO SEASPARROW	OPN	-	- 2.0	- 5.0	-37.2
AM-8	A-6E Procurement	APN	-	-	-	-20.3
AM-9	EA-6B Procurement	APN	-	-	-	-21.1
AM-10	C-2A Procurement	APN	-	-	-16.3	-58.4
AM-11	CH-53E Procurement	APN	-	-	-	-35.0
AM-12	TAO Multi-Year	SCN	-7.7	-12.5	-46.3	-66.5
AM-13	Standard (SM-1)	WPN	-	-	-	-62.7
AM-14	MK-46 Torpedo	WPN	-	-	-	-40.4
AM-15	MULE	PMC	-	-	- 2.1	- 5.5
	TOTAL		-7.7	-14.5	-69.7	-347.1

DEPARTMENT OF THE NAVY
ECONOMIES & EFFICIENCIES
(TOA, $ MILLIONS)

ECONOMIC PRODUCTION RATES

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
AP-6	AN/SSQ-47 Sonobouy	OPN	-	-	-	- 3.2
AP-7	AN/BQQ-5	OPN	-	-	-	- 1.3
AP-8	TSEC/KG-45	OPN	-	-	-	- 0.8
AP-9	SH-60B Procurement	APN	-	-	-	-26.7
AP-10	CH-53E Delivery Schedule	APN	-	-	-5.0	-10.0
AP-11	Common ECM-ALQ-126	APN	-	-	-	-
AP-12	Aircraft Production Rate, CH-53E	APN	-	-10.9	-	-10.9
AP-12	Aircraft Production Rate, SH-60B	APN	-	-190.8	-	-190.8
AP-12	Aircraft Production Rate, A-6E	APN	-	-34.5	-23.9	-58.4
AP-12	Aircraft Production Rate, EA-6B	APN	-	-16.9	-19.9	-36.8
AP-12	Aircraft Production Rate, F-14A	APN	-	-28.5	-42.4	-70.9
	TOTAL		-	-281.6	-91.2	-409.8

ELIMINATION/REDUCTION OF MARGINAL PROGRAMS/SYSTEMS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
AX-10	AN/SPS-52 Radar	OPN	-	-	-14.6	-71.1
AX-11	Channel Finder	OPN	-	-	-	-31.5
AX-12	Gun Fire Control	OPN	-	-	-24.1	-54.9
AX-13	SMS ORDALTS: TARTAR	OPN	-	-	-42.6	-223.4
AX-14	5" Guided Projectile	OPN	-	-16.5	-29.8	-516.7
AX-15	Advanced Base Functional Components	OPN	-	-	-11.0	-169.0
AX-16	Ship Systems Modernization	OPN	-	-	100.6	-442.0
AX-17	NOSS	RDT&E,N	-10.7	-46.1	-87.9	-518.6
AX-18	Weaponizing Proto	RDT&E,N	-	-2.0	-3.0	-32.4
AX-19	SOJS (THOR)	RDT&E,N	-	-10.1	-22.3	-285.8
AX-20	CAML	RDT&E,N	-1.8	-5.7	-5.7	-26.1
AX-21	Super Torch	RDT&E,N	-	-4.3	-3.2	-22.0
AX-22	VCX	RDT&E,N	-	-32.6	-	-32.6
AX-23	TEWDS	RDT&E,N	-	-8.8	-6.9	-120.6
AX-24	MADAIR	RDT&E,N	-	-2.3	-3.7	-22.5
AX-25	Buried Minehunt	RDT&E,N	-2.1	-1.8	-5.0	-38.1
AX-26	IIR Harpoon	RDT&E,N	-	-38.6	-39.8	-141.0
AX-27	HY 130 Steel	RDT&E,N	-	-.7	-1.8	-2.5
AX-28	MDM	RDT&E,N	-	-7.4	-38.0	-206.4
AX-29	RECO	RDT&E,N	-	-	-1.2	-22.5
AX-30	EMCARD	RDT&E,N	-	-2.4	-2.8	-16.5
AX-31	Mobile Tracking Range	RDT&E,N	-	-6.5	-4.1	-10.6
AX-32	DASS	RDT&E,N	-	-3.8	-1.4	-8.3
AX-33	RFX	RDT&E,N	-	-	-17.0	-145.7
AX-34	Dual Mini Sins	RDT&E,N	-	-1.0	-.5	-1.5
AX-35,		APN	-	-	-	-214.3
59	AWSACS	RDT&E,N	-	-	-22.4	-134.5
AX-36	Linear Chair	RDT&E,N	-	-4.0	-1.4	-5.4

DEPARTMENT OF THE NAVY
ECONOMIES & EFFICIENCIES
(TOA, $ MILLIONS)

ELIMINATION/REDUCTION OF MARGINAL PROGRAMS/SYSTEMS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
AX-37	VLS ASROC	RDT&E,N	-	-15.3	-27.6	-77.0
AX-38	AEPS II	RDT&E,N	-	-	-2.7	-16.6
AX-39	Seafire	RDT&E,N	-	-1.8	-17.0	-67.1
AX-40	Firebrand	RDT&E,N	-	-1.1	-23.7	-117.9
AX-41	CH-46 Ext Tank	RDT&E,N	-	-	-1.2	-1.2
AX-42	PCOTES	RDT&E,N	-	-5.0	-5.0	-10.0
AX-43	Linear Echo	RDT&E,N	-	-	-7.9	-14.7
AX-44	Navy Future Communications	RDT&E,N	-	-2.7	-5.0	-33.9
AX-46	NAVOSH Program	MILCON	-	-	-11.0	-50.8
		OPN	-	-3.5	-3.0	-18.5
		O&MN	-	-2.5	-3.0	-17.5
AX-47	H-46 Emergency	APN	-	-	-1.7	-4.1
		O&M,N	-	-	-	-.5
AX-48	H-46 AAR Infrared Warning	APN	-	-	-1.4	-14.6
		O&M,N	-	-	-	-1.7
AX-49	Ground Proximity Warning	APN	-	-	-	-15.0
AX-50	S-3 Aircraft Ejection Seat	APN	-	-	-2.1	-6.1
AX-51	S-3 Aircraft IFR Probe	APN	-	-	-1.7	-3.4
AX-52	S-3 TACAN Excap Antennaa	APN	-	-	-1.2	-5.6
AX-53	P-3 Aircraft TACNAV	APN	-	-	-34.4	-58.8
		O&M,N	-	-	-	-4.3
AX-54	Aircraft 25MM Gun	APN	-	-	-	-107.1
AX-55	Aircraft Modification Comm-ECM (ALR-45)	APN	-	-	-	-
AX-56	H-46 Extended Range Fuel Tanks	APN	-	-	-	-15.0
AX-57	F-4 Aircraft APR-43	APN	-	-	-4.5	-9.7
		O&M,N	-	-	-.3	-2.8
AX-58	F-4 ARN-118	APN	-	-	-3.4	-5.1
		O&M,N	-	-	-.1	-2.0
AX-60	P-3C Multi-Signal/Bite	APN	-	-2.3	-7.3	-16.1
	TOTAL		-14.6	-228.8	-656.0	-4,213.6

OTHER ACQUISITION IMPROVEMENTS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
AO-3	SH-2F Contract	APN	-	-38.7	-	-38.7
AO-11	Ammunition Acquisition Efficiencies	PMC	-	-	-4.5	-9.0
		OPN	-	-	-1.7	-4.4
AO-17	CVN Procurement	SCN	-	-	-	-753.7
	TOTAL		-	-38.7	-6.2	-805.8

DEPARTMENT OF THE NAVY
ECONOMIES & EFFICIENCIES
(TOA, $ MILLIONS)

ADMINISTRATIVE OVERHEAD

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
OA-1	Consultants, Studies, and Other Contractual Efforts	O&M,N	-12.0	-123.2	-126.8	-1,055.8
		O&M,MC	-.2	-.5	-5.8	-32.3
		O&M,NR	-.1	-.1	-1.0	-5.5
		APN	-.8	-6.8	-3.0	-13.6
		WPN	-.2	-.4	-	-.6
		SCN	-1.4	-16.5	-5.0	-27.9
		OPN	-.5	-4.0	-1.0	-6.5
		PMC	-	-.1	-	-.1
		RDT&E,N	-11.9	-47.3	-34.0	-177.2
OA-2	Item, Travel	O&M,N	-2.9	-9.3	-9.9	-64.5
		O&M,MC	-.5	-.6	-.6	-4.1
		O&M,NR	-.1	-.1	-.1	-.7
		O&M,MCR	-.2	-.1	-.1	-.8
		RPN	-	-.7	-.7	-4.2
		RPMC	-.1	-.3	-.3	-1.9
		RDT&E,N	-	-.2	-	-.2
OA-5	Buy vs Lease of ADP Equipment	O&M,N	-	-	-3.0	-15.2
		OPN	-	-	+5.6	+5.6
OA-10	Dining Hall Controls	MPMC	-	-.9	-2.5	-13.4
		MPN	-	-.9	-2.0	-10.9
	TOTAL		-30.9	-212.0	-190.2	-1,429.8

BASE REALIGNMENTS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
OB-2	Air-630	O&M,N	-	-.2	-.2	-1.2
	TOTAL		-	-.2	-.2	-1.2

LOGISTICS IMPROVEMENTS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
OL-10	CARI Program	O&M,N	-	-	-2.5	-13.7
OL-11	CONTRUCK	O&M,N	-	-1.6	-1.6	-10.3
OL-12	Transfer of Consumable Item Management	O&M,N	-	-.2	-3.6	-18.2
		O&M,MC	-	-	- .2	- 1.0
OL-13	Property Shipping Office Consolidation	O&M,N	-	-1.1	- .5	- 3.6
OL-14	Sealift Cargo Booking	O&M,N	-	-	- .3	- 1.5
OL-15	MSC/MTMC Consolidation	O&M,N	-	-	-	-28.0
OL-16	Automated Markings (LOGMARS)	O&M,N	-	-	- .3	-29.2
		O&M,MC	-	-	-	-27.3
		OPN	-	-	+5.6	+20.6
		PMC	-	-	+ .8	+ 2.8
	TOTAL		-	-2.9	-2.6	-109.4

DEPARTMENT OF THE NAVY
ECONOMIES & EFFICIENCIES
(TOA, $ MILLIONS)

ELIMINATE/REDUCE MARGINAL EQUIPMENT

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
OM-1	Furniture	O&M,N	-	-	-1.7	-9.1
	TOTAL		-	-	-1.7	-9.1

OTHER OPERATIONS IMPROVEMENTS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
OO-1	Energy Conservation	FHN	-	-	-	-
OO-4	Miscellaneous Audit Report Savings	WPN	-	-	-2.5	-2.5
		O&M,N	-	-.9	- .9	-5.4
		O&MMC	-	-.2	-.3	-1.7
		MILCON	-	-	-1.4	-1.4
OO-5	NFC Cleveland Computer	O&M,N	-	-.9	-.9	-5.8
OO-6	Military Records Maintenance	O&M,N	-	-.1	-.2	-1.1
OO-9	Commercial Satellite Broadcasts	O&M,N	-	-	-.4	-17.1
	TOTAL		-	-2.1	- 6.6	-35.0

INCREASED PRODUCTIVITY

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
OP-7	SDAN	O&M,N	-	-.6	-.6	-3.8
OP-8	Music Program	MPN	-	-.5	-1.0	-5.5
		O&M,N	-	-.1	-.1	-.6
OP-9	Recruiting and Advertising	O&M,N	-	-11.0	-8.7	-58.7
OP-10	Military Pay System	O&M,N	-	-.8	-1.2	-7.4
OP-11	Joint Advertising	O&MMC	-	-1.7	-1.7	-10.2
		O&M,N	-	-2.4	-2.4	-15.5
OP-12	Recruiting Data Systems	O&M,N	-	-.1	-.1	-.6
OP-13	Underutilized Computers	O&M,N	-	-.4	-.7	-4.2
OP-14	Medical Program	O&M,N	-	-	-.1	-.5
OP-15	NAESU Batch Processing	O&M,N	-	-	-.3	-1.5
		OPN	-	-	+.1	+.1
OP-16	ADP VAX Main Frame	O&M,N	-	-	-1.1	-6.3
		OPN	-	-	+.5	+.5
	TOTAL		-	-17.6	-17.4	-114.2

BASE SUPPORT CONSOLIDATIONS/REDUCTIONS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
OS-6	Defense Retail Interservice Support	O&M,N	-	-	-10.0	-50.0
OS-7	MRP Contract Administration	O&M,N	-	-7.2	-	-7.2
OS-8	Commissary Store Employmentt	O&M,N	-	-2.0	-10.0	-60.0
OS-9	DOD Computer Institute	MPN	-	-	-.2	-1.4
	TOTAL		-	-9.2	-20.2	-118.6

DEPARTMENT OF THE NAVY
ECONOMIES & EFFICIENCIES
(TOA, $ MILLIONS)

ELIMINATE/REDUCE MARGINAL PROGRAMS/SYSTEMS

CODE	TITLE	APPN	FY 1981	FY 1982	FY 1983	FY 1981-87 TOTAL
OX-13	Ship Retirements	O&M,N	-	-8.7	-12.4	-71.3
		O&M,NR	-	-	-3.6	-3.6
OX-14	Pollution Abatement	O&M,N	-	-15.0	-14.0	-91.9
OX-16	Audio-Visual Activities/Periodicals	O&M,N	-	-7.1	-5.2	-35.6
		O&M,MC	-	-.7	-.7	-4.2
		O&M,NR	-	-.1	-.1	-.6
		OPN	-	-1.8	-.7	-5.5
		RDT&E,N	-	-1.2	-.2	-2.2
		MPN	-	-2.7	-2.7	-16.2
		MPMC	-	-.7	-.7	-4.2
	TOTAL		-	-38.0	-40.3	-235.3
	GRAND TOTAL		-61	-932.6	-1,187.7	-9,219.9

Secretary **Lehman**. The news is extremely good, we are very proud of it. We are a little dismayed that good news does not seem to play in the newspapers. We see almost none of this, even though we continually provide it to the press. All we see reported are the cost overruns and defense out of control articles.

The Department of the Navy is not out of control. We have demonstrated an enormous improvement, in the last 12 months, that shows that the Navy is under control. We are bringing cost down in nearly every major program, bringing unit cost down by some $3 to $8 million in some of our major aricraft procurement accounts by increasing production rates and realizing tremendous efficiencies in unit cost. We are asking for four new programs, for multiyear procurement, to add some 10 percent further program savings on these aircraft programs. So, in short, we are confident that we can bring about the restoration of maritime superiority at a cost within what has been projected and directed by Congress.

I think it would be the utmost tragedy to see this momentum undercut by substantial reductions in defense spending to meet a political austerity imperative for a fair share for defense. Defense has taken more than its fair share of cuts for 15 years. We have deficits to make up in virtually every account. We have shown a program that can do that. We have shown, in the last 12 months, that service personnel are responding, in an extremely exciting and patriotic way to this turnaround, by the highest retention figures in the peacetime history of the Navy.

We are not only restoring and filling up the deficits of skills and technical specialties that have built up in the hemmorrhage of the past 3 to 5 years, but we are also building to man the increase in the fleet at a steady rate. We will man the 600-ship Navy in an affordable way.

We hear a lot of criticism that we are gold plating, that we overtend to the high sophistication. The cost of ownership of the fleet in proportionate terms is actually going down because of the prudent investment in high technology, reliability, and maintainability.

REDUCED COSTS OF MANNING FLEET

To give you one measure, despite the enormous increase in 1973 in the payment given to our All-Volunteer Force with the end of the draft, the Navy has actually reduced the cost of manning the fleet with personnel from 20 percent in 1962 to 18 percent in 1982.

To give you one example, the FRAM-1 destroyer, frontline 20 years ago, about 2,700 tons, was manned with 280 men. A far more capable ship, about the same size, 3,000 tons, but certainly much more capable than the FRAM-1 that it has replaced, the FFG-7, the fast frigate, is manned with 100 fewer sailors, at 180 sailors.

A cruiser, the *Salem* class cruiser being replaced by the *Aegis* cruiser, is a major air defense and antisubmarine major surface combatant. The *Salem* was manned with between 1,200 and 1,600 men. The *Aegis* cruiser will be manned by 315 men, and instead of 116 officers on the *Salem,* we have 23 officers on the *Aegis*. So, we are reducing by dramatic bounds the cost of manpower in the Navy, the relative cost and in many cases the absolute cost.

The F/A-18 is another good example. We have invested a great deal of money in the F/A-18 not on the fancy that the press likes to view as gold plating, but on the undramatic reliability and maintainability improvements, the black boxes. By forcing development of black boxes that can last 100 hours between failure instead of the 1½ hours in the aircraft like the F-4 and A-7 that they will be replacing, we will realize great return on our investment.

So, we see now, in the first squadron that has the F/A-18, about four times the maintenance hours per flight hour in the older aircraft than in the F/A-18. That is one-quarter of the man-hours required to maintain those aircraft. That means we are able to man F/A-18 squadrons with about 80 fewer technicians and maintenance personnel than in the A-7 squadron that it replaces.

The cost to the taxpayer of maintaining the force is going down. That is a fact that is overlooked. All of this good news can end this year. I guarantee this committee that the actual impact on our business base and our ability to negotiate the kinds of tough, firm, disciplined contracts that we have now been able to negotiate, the influx of small suppliers across the country that has taken place in the 12 months will all end if we don't continue our program. I would like to submit for the record a list of the massive investments that our suppliers have made, particularly in the shipbuilding industry where investors and boards of directors have made the decision to make large capital improvement investments to do Navy work better at a lower cost.

[The information follows:]

CONTRACTOR INVESTMENT INITIATIVES

The Navy is working with major contractors in the private sector, particularly in the shipbuilding and aerospace industries, to provide for a "reindustrialization" to ensure the capacity is available for anticipated work. The following are examples of companies and the types of capital investments and productivity improvements they are making to provide increased capacity:

Shipbuilding Industry

Todd Pacific Shipyards, San Pedro, CA

- Major waterfront upgrading plan initiated to include a syncrolift drydock.
- Computer Aided Design/Computer Aided Manufacture (CAD/CAM) systems have been added.
- Robotics welding capability added to facility
- Renovation of management information system initiated

Newport News Shipbuilding and Drydock Co., Newport News, VA

- CAD/CAM system added
- Company sponsored advanced welding technology R&D program on-going
- Upgrading/modernization of existing drydock
- Advanced submarine manufacturing facility in planning
- Extensive technology modernization of North Yard in anticipation of additional CVN requirements and to provide for accelerated delivery schedules.

Avondale Shipyards, New Orleans, LA

- Automated pipe shop added
- Zone outfitting and group technology capabilities developed
- Multiple general shipyard improvements added

Bath Iron Works, Bath, ME

- Opening new facility in Portland, Maine including 81,000 ton floating drydock
- Major addition to pre-outfitting/assembly and plate panel facilities
- Robotic shape processing facility added
- Group technology and zone outfitting capabilities developed
- CAD/CAM automated sheet metal shop added

Peterson Shipbuilders, Sturgeon Bay, WI

- Technology upgrades to support additional MCM and ARS ships

Todd Pacific Shipyards, Seattle, WA

- 40,000 ton drydock
- 150 ton Gantry Crane
- 1000 foot deep draft pier
- Computerized master scheduling
- Modernization/renovation of numerous facilities

Lockheed Shipbuilding, Seattle, WA

- Extensive computerization of processes
- Numerically controlled plasma burners
- Rebuilding of shipways and craneways
- Robotics

Northwest Marine, Portland, OR

- Portland Repair Yard 80,000 ton floating drydock
- New lathe and boring equipment
- Extensive support facilities added/upgraded

Metro Machine, Norfolk, VA

- New 13,000 ton floating drydock

Atkinson Marine, San Diego, CA

- New repair/overhaul site completed

In addition, the Navy is introducing the use of commercialized procedures for obtaining auxiliary support ships such as the T-AO which should increase the industrial base by involving additional commercial builders in Navy work.

Aerospace/Electronics Industry

Hughes Aircraft Co., Los Angeles, CA

- Manufacturing technology program - modernization on-going
- Advanced factory design effort undertaken
- Acceleration of CAD/CAM

Northrop Hawthorne, CA

- Three-phase manufacturing technology/factory modernization program undertaken
- Use of Integrated Computer-Aided Manufacturing techniques (ICAM)
- Identification of candidate areas on F/A-18A program for productivity improvements.

Williams Research Corp., Walled Lake, MI

- Identification of candidate areas for cruise missile F-107 engine productivity improvements
- Factory/technology modernization programs on-going
- Program to increase use of robotics and automated inspection initiated

Intercontinental Manufacturing Co., Garland, TX

- Facility modernization undertaken for production of SM-2 missile parts

FMC Northern Ordnance, Minneapolis, MN

- Laser welding facility added for missile launcher and gun mount production capability.

The following additional companies have on-going technology modernization programs within their facilities to support Navy programs for various major air frame and strategic missile programs.

- General Electric - multiple locations
- McDonnell Douglas, St. Louis, MO
- Martin Marietta, Orlando, FL, and Denver, CO
- Grumman Corporation, Bethpage, NY

The Navy has also initiated productivity improvements within its Government-owned and operated facilities (GOGO) through the Industrial Fund Capitalization Program and has significantly increased the current FY 82 budget to $60M for application to industrial shore establishment productivity improvements. The Navy will continue to explore this important program and work vigorously towards a more productive industrial base.

TAKX PROGRAM

Secretary **Lehman**. We see the results of this immediately. In the TAKX program, for instance, we received 26 bids when we expected from 3 to 5. The results of that competitiveness give us a range of very, very attractive proposals that are going to save the taxpayer a great deal of money, just over what we estimated a year ago when we testified on behalf of that program.

All of that will end if, suddenly, we head downhill again with symbolic cuts, of any major proportion, to budget authority. I think it would be a tragedy, and I think it will end, what I see as, the last chance to break into the spiral of cost overruns and of monopoly supply in the defense industries. It would be a tragedy.

I believe that summarizes the major message I would like to leave with the committee. I plead that it is genuinely the last opportunity we are going to have. We are off to a good start. We have demonstrated it can be done, and major cuts are going to make this the last time it will ever be attempted, in my judgment.

Thank you very much, Mr. Chairman.

Senator **Stevens**. Thank you, Mr. Secretary.

[The prepared statement of Hon. John R. Lehman, Jr., follows:]

Prepared Statement of Hon. John F. Lehman, Jr.

SECRETARY OF THE NAVY

Mr. Chairman, I am pleased to have this opportunity to present my current assessment of the United States Navy posture.

One year ago I outlined to this Committee our priorities for restoring adequate strength to the United States Navy and Marine Corps. For the first time in recent history, the Department of the Navy leadership testified that we had lost maritime superiority. The budget that has been presented to you by the President has as its principal objective the restoration of that maritime superiority.

As a nation with global commitments and interests, U.S. national security requirements extend far beyond its boundaries. Since WWII, we have protected these interests through a forward defense posture that has as its goal the deterrence of threats and a rapid flexible response should deterrence fail. Strong naval forces are absolutely essential to our forward strategy.

The term "maritime superiority" is not nearly as important as what is meant by that shorthand term, which is that "our nation must be capable -- and be seen as capable -- of keeping our access secure to areas of vital interest, and we must be able to do this in the face of the most determined opposition. A stalemate is unacceptable, because it is we who depend on the seas." Freedom of access to the seas is itself a national objective -- a security imperative, an essential condition for the success of any national security strategy.

"Maritime superiority" does not mean that we must seek to be omnipresent on all oceans, nor act as the world's naval policemen. It means that in those areas of our vital national interests we can sustain the access and freedom of movement we need, even if challenged by the combined military threat of our adversaries. Geography, which strongly favors the U.S. and its allies, sets the parameters of our task. This Administration's naval rebuilding program is absolutely essential to the successful achievement of this task, with the important contributions of friends and allies, and the added capabilities of U.S. air and land forces.

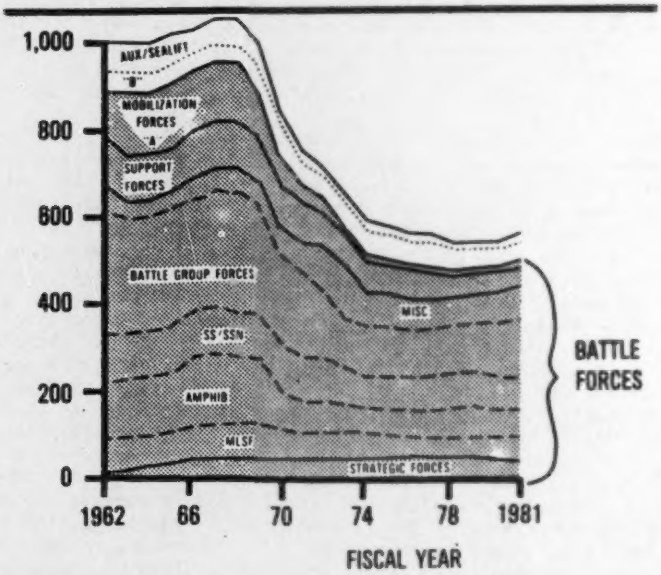
"Maritime superiority" provides the flexibility to offset enemy advantage and exploit weakness. Deterrence of general war is thus fortified by safeguarding the necessary reinforcement and resupply of our forward deployed units and by threatening enemy vulnerabilities in widely separated areas. "Maritime superiority" is not matching a potential enemy ship for ship, sailor for sailor, it is our capability to use to advantage important maritime areas when and where required. "Maritime superiority" is the confidence that those maritime tasks essential to our security can be accomplished successfully.

The strategy of maritime superiority is an imperative based upon national commitments that are firmly founded in law through a web of some 40 treaties around the globe. These in turn reflect our vital national interests. They should, of course, be abrogated if they do not. Therefore the commitments that our force levels are designed to meet are not a matter of the Department of the Navy's discretion, nor of the Department of the Defense. The force level presented in this budget - the 15 battlegroup 600-ship Navy; and the strengthened Marine Corps, is the minimum force expansion necessary to meet national commitments. Smaller force levels would only be sufficient and justifiable if some national commitments were to be abandoned.

The 1983 budget for the Department of the Navy embodies a major new management program. Its new elements include:

- New contract discipline wherein contractors bear more risk and responsibility for performance, and have substantial profit incentive to come in under cost and ahead of schedule.
- Implemenation of the 31 "Carlucci" DOD managment and procurement initiatives.
- Multi-ship procurement of aircraft carriers.
- Multi-year procurement of aircraft.
- Maximum utilization of older and existing assets.
- Product improvement of proven systems rather than new development.
- Substantially increased competition in the shipbuilding program.
- Cancellation of 43 marginal development and procurement programs.
- Shortening of the development deployment cycle.

Major Procurement Issues



U.S. NAVY SHIP FORCE LEVELS

Years of deferral have required that we begin our naval recovery program from a reduced base. As in many areas of our defense posture, the Soviets had strong momentum in their building programs. We had none. One year ago we had a base of 12 deployable aircraft carriers and 12 carrier air wings, with no replacement aircraft. We had a 469 ship fleet, which included 78 attack and 32 missile submarines. In that year we outlined a force structure expansion of some 30%, building to 15 battlegroups and about 100 attack submarines. The program required additional aircraft carriers, battleships, attack and strategic submarines and ships for amphibious assault, strategic sea-lift, fleet support, and mine warfare, as well as other support vessels required for a balanced fleet.

Number of Battlegroups Needed to Support National Strategy

Because of the emergence of global Soviet maritime power, the number of battlegroups necessary to avoid turning over any of our vital maritime areas to Soviet control is calculated on a number of factors - geographic advantage, substantial U.S. Air Force contributions, the synergy possible with mobile Army forces and allied Navy and Marine forces, and the strike capability that only U.S. battlegroups can provide. The minimum number of battlegroups necessary to carry out a strategy that will maintain all of our vital interests is 15.

Multi-Ship Procurement of Two Nuclear Aircraft Carriers

The procurement strategy of fully funding CVN-72 and CVN-73 in FY 83 delivers each of two vitally needed ships 22 months early, provides nearly four additional ship-operating years, and saves about $750M when compared to the usual sequential procurement strategy of funding carriers individually in separate years. The Navy's plan fully funds the ships' end cost in FY 83. This procurement reflects not only the full-funding policy expressed by both the Congress and the Office of Management and Budget, but will also significantly strengthen our vendor and contractor industrial bases.

The Department of the Navy has studied, and continues to study, alternate aircraft carrier designs. Congress has been provided with detailed designs of carriers ranging from 15,000 to 100,000 tons. Many of these designs would be extremely valuable military assets. Nevertheless, we conclude from all source evidence including the study of new technology that the NIMITZ-Class nuclear carrier clearly remains the most cost-effective option, and the very best means to meet both war-fighting needs and maximize deterrent posture into the future. The extensive data base the Navy has developed by operating carriers of all sizes for many decades yields no other conclusion.

The large size of the NIMITZ permits the operation of an airwing with a four-dimensional capability. Action can be taken simultaneously against air, land, surface and sub-surface adversaries. It can operate the entire range of tactical aircraft, both conventional and VSTOL, with the flexibility to adapt to all potential military requirements. Moreover, it possesses the sustainability required not only to get to the scene of action but to stay there — and win.

The NIMITZ design provides enormous additional operational safety and flexibility in high sea states and all-weather conditions by having a large and stable deck. Accident rates for smaller carriers currently in operation, and for those in prior years, are much higher than for the NIMITZ class.

The NIMITZ class now has the passive protection that we have learned - through the experiences of World War II, and through constant monitoring of the latest Soviet developments - are necessary to fight, take damage, and prevail.

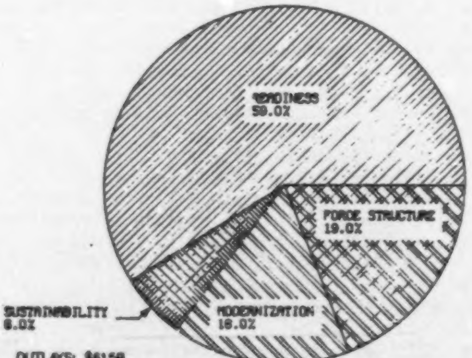
Aircraft Procurement

The 1983 DON budget includes procurement of 288 aircraft. The number is approximately double that planned previously and saves the taxpayer an enormous amount of money, through economies of scale. We have succeeded in reducing the constant dollar unit cost of the F-14, A-6E, C2A and EA6B substantially. I would strongly urge that no changes be made in our APN account that would reduce the substantial unit cost savings now available.

The Balance Between Operations, Maintenance, Readiness and Sustainability, and The Investment Accounts

Concurrently with the significant decline in our force structure over the past decade, there was an equally alarming decline in our readiness and sustainability. Much publicity attended reports of large shortages of ammunition, weapons, and maintenance spares. The Reagan supplemental to the 1981 budget and the revision of the FY 1982 budget placed top priority on rapidly recovering from these accumulated deficits. This turnaround has been dramatically achieved. The current budget continues to restore health to our readiness and sustainability accounts. In every category we see continued improvement, building on the '81 and '82 appropriations. In some categories, particularly in the maintenance of sufficient quantities of higher technology ammunition and weapons, we would like to see faster growth. But we do view the current program as balanced.

U.S. NAVY FY83
MILITARY CAPABILITY COSTS
PROJECTED FY83 OUTLAYS



Manpower and Personnel

The dramatic turn-around of recruiting and the retention of skilled personnel in the Navy and Marine Corps has been one of the most successful developments of the last 12 months. Set in motion by the leadership of this committee in 1980, this success has been built on determined and innovative actions by this Congress and by the Reagan Administration, who have followed through on their commitment to bring pay and compensation back to the comparability levels of 1973. This has now been accomplished, and the results have exceeded predictions for manning our expanding Navy. In addition to the monetary changes, there is no doubt that the renewed prestige accorded the military by Congress and the Administration, and the support and appreciation of the American public - as well as President Reagan's ambitious rearming of America - have all contributed significantly to the excellent personnel news of the last 12 months.

Enlisted Recruiting

In FY-81, the Navy exceeded its total enlisted accession goal, recruiting 106,322 personnel. For 26 straight months, we have made over 100% of quota, and the quality has been steadily increasing. The Marine Corps has exceeded its annual recruiting goal for both FY-80 and FY-81. High school graduate accessions remain above 80%.

Nuclear Officer Recruiting

With high civilian salaries to attract nuclear-trained officers, this community has long suffered from chronic officer shortages. The result has been long and repeated tours at sea. Officer Sea Pay, increased Sub Pay, and increased Nuclear Bonus rates have acted together to reduce resignations by 23% during the past year. A number of former nuclear-trained officers have also returned to active duty as a result. We have, therefore, been able to reduce an officer's sea time from 15 to 14 of his first 20 years. We are confident we will eventually be able to achieve a goal of 11 years at sea.

Aviation Officer Retention

The most dramatic example of the great savings that the pay initiatives of last year have provided is in aviation officer retention. With a total expenditure of only $33.9 million in FY-81, and $55.6 million planned in FY-82, we have been able to reverse the extremely low rates of retention for pilots and naval flight officers. Because it takes $850,000 to train a naval pilot, and $650,000 to train a naval flight officer, the ability to retain experienced aviators during the most useful periods of their careers is very cost effective. In fact, because of the bonus, we have retained over 500 pilots and 125 NFOs that were expected to leave the Navy and Marine Corps. A conservative estimate would suggest a taxpayers' savings of approximately 450 million dollars in training costs during the past 12 months alone. As a result of this positive trend, we can now expect substantial savings in the development and procurement of a new training aircraft, largely because we now have unexpectedly achieved our goal in naval flight officer numbers. We are now able to recommend reprogramming money previously planned on maintaining a much higher level of NFO training. Additionally, the retention of skilled and experienced aviators provides an immediate and lasting increase in fleet readiness and combat capability, and a lowered accident rate.

Can We Afford a 600-Ship Navy

The program that we have put forward recommends that Congress face up squarely to the issue of whether we intend to meet our national commitments or not. We have put forward a program that can achieve the minimum force levels, readiness, and manning needed to meet national commitments and to secure peace in this decade and beyond. Most importantly, our program puts forward an optimum strategy for procuring this force at maximum savings to the taxpayer. Unlike traditional patterns in previous five-year plans, this Department of the Navy program is front-loaded. We are asking Congress to face squarely the issue of obligating funds now which, though large in obligational authority, will be paid out over some 8 years. By courageously facing up to the issue of fully funding two aircraft carriers and the remainder of our $19 billion shipbuilding account, and in fully funding cost-effective production rates in our aircraft procurement account, Congress can break out of the cycle of cost-overruns and deferred cost growth that has plagued defense policy for at least the last decade.

The cost of substantial cuts in these initiatives will be enormous, and they too must be faced. If cuts are made in this program, I believe it may never again be possible to obtain the enthusiasm - and the commitment to competition and investment - that we have now obtained from our shipbuilding and aerospace industry. Unit costs will skyrocket and in the end the taxpayer will pay far more for whatever force size is ultimately established by Congress. Conversely, this committee knows well that even the cancellation of both aircraft carriers, and a halving of the total requested obligational authority for shipbuilding, will provide less than $1 billion of savings to the 83 budget deficit.

History clearly shows that nothing is more costly than the outbreak of war. That is precisely what I believe we risk in the long run - and possibly in the short run - if the momentum of President Reagan's rearming of America and the restoration of clear maritime superiority is lost through substantial cuts to the 1983 budget.

NAVAL OPERATIONS

STATEMENT OF ADM. THOMAS B. HAYWARD, USN, CHIEF OF NAVAL OPERATIONS

ACCOMPANIED BY:

REAR ADM. RICHARD A. MILLER, USN, DIRECTOR OF BUDGET AND REPORTS, DEPARTMENT OF THE NAVY

AUTHORITY AND OUTLAY DOLLAR GROWTH

Senator **STEVENS**. Admiral Hayward.

Admiral **HAYWARD**. Good morning, Mr. Chairman, Mr. Rudman. Just a few remarks to augment what Secretary Lehman has laid out in his opening statement.

As we look at the Navy's budget, you have highlighted, Mr. Chairman, the growth in total dollars in both budget authority and outlay. There is a proper emphasis on that, so let's focus on it. It is important to recognize what we are attempting to do and the magnitude of it.

There is also a natural tendency when looking at the Navy's budget to look at the "big ticket" items, the two nuclear-powered carriers that we seek appropriation for this year and the two nuclear-powered Trident submarines. But while we focus on those items, I would like to stress that we need to go back to the basics in assessing the Navy's budget, to keep it in the context of its balance, and to concentrate on the reason why we have built this budget and submitted it to you, and recognize that it has the full support of the President.

Our basic objective is to restore our naval superiority. For the past 3 years in my testifying before you and all of the 4 years of my predecessor, there has been a consistent theme—we were headed in the wrong direction; a serious difficulty over the lack of investment into a naval posture for the future. Simultaneously, we have observed a major change in the Soviet naval structure.

The two significant things that have happened in Soviet military posture have occurred not in ground forces or air forces—both of which have been modernized but are very traditional. One of the two significant things that have occurred is the major change in their strategic nuclear posture in land-based ICBM's and a major development in sea-based ballistic missiles. The second part of what has happened is to their Navy—a significant change in their Navy. If our Navy today were facing the Soviet Navy of the 1950's and 1960's we would not be here asking for this increased size Navy. We would not be here concerned about the loss of naval superiority.

It is the major improvement in Soviet capability that has been going on for years which troubles us. The Soviets today are outbuilding us 2 to 1 in every major category of ships—and I am not talking about small, cheap ships; I am talking about cruisers, destroyers, big ships, and now aircraft carriers. They are outbuilding us 4 to 1 in submarines; they are outbuilding us 12 to 1 in all the other types of ships that are required to make a proper Navy.

So, the issue is the threat, our being able to contest that threat and to be superior to it.

We now have a budget before you that recognizes the theme which the Congress in the last 2 years has itself recognized—that the Navy has been headed in the wrong direction relative to the Soviets. The Congress added to the Navy's budget for the past 3 years several billion dollars, several new ships, added to aircraft procurement, signaling to the administration its dissatisfaction with the level of naval investment.

NAVY REBUILDING PROGRAM

Now we have an administration that has come forward with a budget that indicates we want to get on with rebuilding our strength. We want to get on with restoring our naval superiority. But the criticism is going to be, "You have asked for too much."

Let me point out that in the aircraft procurement we are seeking in 1983, in this budget, there are 288 airplanes. That is a significant growth from prior years, but it is still less than what is required just to hold even with the current force structure, much less a growing one. We should be building about 330, 340 new aircraft a year, and that number will have to increase as we get to 14- and 15-carrier battlegroups.

We are asking for 18 ships this year in new construction. We should be up around 26, 28, or 30. So, it is a tight, constrained budget. Many of our aircraft production lines would be more efficient with larger procurements. Yet we have had to hold them down because of affordability limitations.

The same is true of the shipbuilding program. We should be asking for at least three SSN-688 attack submarines; we should be asking for four *Aegis* cruisers. Our oiler program is not coming along as rapidly as we need it. The amphibious modernization could easily go faster.

The purpose of my reviewing this is to emphasize that as large as this budget might appear to be—and it is—it is still only the first step of what has to be a series of commitments over the years to build up the naval strength and reassert our selves as the premier Navy on the oceans today.

The share of budget growth from 1981 to 1982, and from 1982 to 1983, is consistently projected in the news as being all Navy. We read a major article a few weeks ago about "The High Cost of Naval Superiority." But if you actually look at the growth rate of outlays, the amount of money that is impacting on the national deficit, the growth rate across the last 2 years, you will find that the U.S. Navy has had the least of the four services in terms of real growth. That is not to suggest the other services do not need what they are asking for, they do. It is simply to address the myth that this superior Navy we are trying to achieve is preventing us from doing other important things for defense. All the defense budget needs is to supported.

NAVY READINESS

The two other areas that I would like to talk about very, very briefly have to do with the importance of making the Navy today very ready to go. Over the last 3 years we have added billions to our readiness account, spare parts, component repairs, repairs of ships, the things that help us make the Navy able to do its job better, and we are improving daily in our readiness. But we are not there yet.

We have added billions more to this budget for the purpose of keeping that momentum going. Likewise, we have added billions into sustainability, the combat sustainability—largely in ammuinition, missiles, torpedos, things of that sort. It will not be until 1985 or 1986 that we will achieve our objectives, presuming that this budget is supported.

So, one does not want to destroy the effort that we have had ongoing for several years to regain the readiness of today's forces.

Whatever size Navy we need to have is ultimtely the decision of the Congress and the American people. But, let us make it a first-class Navy, able to operate and sustain itself in combat.

NAVY PERSONNEL

The last thought has to be with the people that make the Navy work. They are good people today. They are encouraged people today, they are enthusiastic about what is going on in this country. They are enthusiastic about their own service. This in large measure is a reflection of their appreciation of the congressional support that has been so dominant for the last 2 years. But we now hear discussions about capping military pay again, cutting back on various benefit programs. I cannot imagine anything more destructive to the readiness of today's forces than to send a negative signal out to the fleet at this time when you have such a positive return from the efforts of the Congress over the last 2 years.

Last year, we retained in the U.S. Navy over 5,000 more people that we had planned. That is good news. These are talented, trained people helping us to get out of the hole that we have been in for years, the 20,000 or more shortage of petty officers. We retained over 5,000 more than we planned on.

The price of replacing, these people is well over a billion dollars. That is the "cost avoidance" to replace them—a result of the pay raises that you gave them. We do not want to reverse that trend. Our retention, as the Secretary said, is the highest we have seen since we have been recording retention. We need to retain that momentum for several more years to man up this fleet that we are building toward, to overcome the personnel shortages that we have had over the last several years.

Thank you, Mr. Chairman.

Senator STEVENS. Thank you, Admiral.

[The prepared statements of Adm. Thomas B. Hayward and Rear Adm. Richard A. Miller follow:]

PREPARED STATEMENT OF ADM. THOMAS B. HAYWARD

CHIEF OF NAVAL OPERATIONS

CNO OVERVIEW

MR. CHAIRMAN, I AM PLEASED AS ALWAYS TO HAVE THE OPPORTUNITY TO PRESENT TO THIS COMMITTEE MY OVERVIEW OF THE UNITED STATES NAVY. THIS YEAR'S BUDGET IS, IN MY JUDGMENT, PARTICULARLY CRITICAL TO THE INTERESTS OF THE UNITED STATES AS THE LEADER OF THE FREE WORLD.

THIS IS A TIME IN WHICH IT IS CLEAR TO ALL THAT THERE ARE STRONGLY COMPETITIVE DEMANDS FOR OUR FEDERAL GOVERNMENT'S LIMITED RESOURCES. IN THE CONTEXT OF BURGEONING DEFENSE BUDGETS, THERE ARE CONFLICTING PRESSURES TO MEET DOMESTIC NEEDS. HOWEVER, THESE NEEDS MUST BE ADDRESSED WITH FULL AWARENESS THAT WE LIVE IN A PERIOD WHEN, IF THERE IS ANY CLEAR SIGNAL FOR THE DECADE AHEAD, IT IS THAT THE RISK OF CONFLICT IS HIGH AND INCREASING. AS ONE ASSESSES THE DRAMATIC GROWTH IN OUR PRINCIPAL ADVERSARY'S MILITARY STRENGTH, OVERLAID ON HIS AGGRESSIVE AND ADVENTURISTIC FOREIGN POLICY, IT SHOULD BE EQUALLY CLEAR THAT THE SECURITY INTERESTS OF THE FREE WORLD HAVE SELDOM, IF EVER, BEEN MORE DEMANDING.

THE PRICE OF SECURITY HAS ALWAYS BEEN HIGH AND THE CONSEQUENCES OF WAR HAVE NEVER SEEMED MORE TERRIBLE. HENCE, OUR RESOLVE TO MAINTAIN THE PEACE CANNOT SAFELY BE ALLOWED TO BE DILUTED BY COMPETITION FROM OTHER NATIONAL PRIORITIES, HOWEVER VALID THEY MAY BE. THE ALTERNATIVE HIGH COST OF WAR ALWAYS HAS AND ALWAYS WILL OUTSTRIP THE FINANCIAL BURDEN OF MAINTAINING THE PEACE. THEREFORE, OUR RESPONSIBILITY TODAY IS TO MAINTAIN OUR SECURITY POSTURE IN SUCH A WAY THAT NO NATION, HOWEVER DESPERATE, WILL CHOOSE TO TEST OUR CAPABILITIES. YET, SHOULD DETERRENCE FAIL TO PRESERVE THE PEACE, WE MUST ALWAYS HAVE ADEQUATE STRENGTH TO ASSURE AN OUTCOME THAT PRESERVES OUR INDEPENDENCE AND FREEDOM. NAVAL SUPERIORITY IS A VITAL ADJUNCT TO THESE OBJECTIVES.

SECRETARIES WEINBERGER AND LEHMAN, TESTIFYING EARLIER, HAVE MADE IT VERY CLEAR THAT IT IS THE POLICY OF THIS ADMINISTRATION, TO RESTORE MARITIME SUPERIORITY TO THE UNITED STATES. THEY APPRECIATE THE STRATEGIC TRUISM THAT POSSESSING MARITIME SUPERIORITY IS FUNDAMENTAL TO THE ACHIEVEMENT OF THE NATIONAL MILITARY OBJECTIVES OF OUR NATION. THEY ALSO RECOGNIZE THAT IT WILL TAKE SEVERAL YEARS TO MAKE UP FOR THE DECADE OR MORE OF INADEQUATE INVESTMENT IN OUR NAVAL STRENGTH.

ONE OF THE MOST ENCOURAGING THINGS TO ME IN THE PAST THREE YEARS AS CHIEF OF NAVAL OPERATIONS HAS BEEN THE "SENSE OF CONGRESS AMENDMENT" IN SECTION 782 OF THE 1982 DEFENSE APPROPRIATIONS ACT IN WHICH YOU MADE CLEAR THE CONGRESSIONAL POSTION THAT A LARGER AND STRONGER AMERICAN NAVY IS NEEDED AS AN ESSENTIAL INGREDIENT OF OUR ARMED FORCES.

IT IS CLEAR THAT THE CONGRESS OF THE UNITED STATES WANTS, EXPECTS, AND, IN FACT, DEMANDS THAT THIS NATION HAVE NAVAL FORCES SUPERIOR TO ANY ADVERSARY WHO MIGHT CHALLENGE US, ESPECIALLY WHEN OUR ALLIES ARE CONSIDERED IN THE BALANCE AGAINST THE SOVIET UNION AND ITS ALLIES. SECTION 782 WENT ON TO SAY THAT "IN ORDER TO CONDUCT THE NUMEROUS AND GROWING MISSIONS OF THE MODERN AMERICAN NAVY, A GOAL OF NAVAL INVENTORY OF APPROXIMATELY 600 ACTIVE SHIPS OF VARIOUS TYPES BY THE END OF THE THE CENTURY AT THE LATEST, IS HIGHLY DESIRABLE..." THE ISSUE BEFORE THIS BODY NOW IS NOT THE NEED FOR MARITIME SUPERIORITY OR THE SIZE AND CAPABILITY OF OUR NAVY, BUT HOW BEST WE CAN GET FROM HERE TO THERE. THE NAVY BUDGET FOR FY 1983 IS A MAJOR INDICATION OF THIS ADMINISTRATION'S COMMITMENT TO THOSE AGREED GOALS.

THE DEPARTMENT OF THE NAVY'S BUDGET BEFORE YOU TOTALS $88.0 BILLION IN OBLIGATIONAL AUTHORITY -- 80.7 BILLION FOR THE NAVY AND $7.3 BILLION FOR THE MARINE CORPS. WITHIN THE NAVY TOTAL, ANOTHER $4.5 BILLION IS PROGRAMMED FOR DIRECT MARINE CORPS SUPPORT. THE NAVY BUDGET REFLECTS AN INCREASE OF $18.7 BILLION OVER THE $62.0 BILLION FOR FY 1982. NAVY OUTLAYS FOR FY 1983 AMOUNT TO $60.9 BILLION, $9.8 BILLION OVER THE $51.1 BILLION IN FY 1982. AN INVESTMENT OF THIS SIZE MUST BE MADE WISELY IF WE ARE TO MAINTAIN THE PROGRESS WE ALL DESIRE TOWARD RESTORING OUR NAVAL STRENGTH.

A GUIDING PRINCIPLE THAT HAS DOMINATED THE PLANNING OF THE NAVY DURING MY TENURE AS CHIEF OF NAVAL OPERATIONS HAS BEEN "WHATEVER SIZE OUR NAVY IS DESTINED TO BE, LET'S ENSURE THAT IT IS THE VERY BEST THAT IT CAN BE." IN OTHER WORDS, THE DECISION AS TO WHETHER WE WILL HAVE 10,12, 15, OR MORE CARRIER BATTLE GROUPS RESTS LARGELY WITH THE PEOPLE OF AMERICA AND THE CONGRESS, NOT WITH THE UNIFORMED LEADERS. THE NAVAL LEADERSHIP CAN ONLY TELL YOU WHAT YOU OUGHT TO HAVE TO MINIMIZE THE RISK. WHATEVER THE DECISION MIGHT BE ON YOUR PART AS TO HOW LARGE A NAVY THE COUNTRY CAN AFFORD, WE MUST HAVE A FIRST-CLASS NAVY -- A NAVY THAT IS READY -- A NAVY THAT IS PROPERLY EQUIPPED -- A NAVY THAT CAN SUSTAIN ITSELF IN COMBAT -- A NAVY THAT IS MANNED BY TRAINED AND COMPETENT PEOPLE -- REMEMBERING ALWAYS OUR PRIMARY MISSION IS TO CONDUCT PROMPT, EFFECTIVE, SUSTAINED COMBAT OPERATIONS. THUS, THE NAVY'S 1983 BUDGET HAS BEEN FORMULATED IN SUCH A WAY AS TO PROVIDE BALANCED INVESTMENT CHOICES AMONG FOUR BROAD ELEMENTS: READINESS, SUSTAINABILITY, MODERNIZATION AND FORCE STRUCTURE.

THE NAVY BUDGET RESOURCES ASSOCIATED WITH THOSE FORCE CAPABILITY ELEMENTS FOR FY 1983 COMPARE WITH THOSE BUDGETED IN FY 1982 AS FOLLOWS:

NAVY FORCE CAPABILITY

	FY 1982		FY 1983	
	$ in Billions	%	$ in Billions	%
READINESS	33.4	54	39.1	48
SUSTAINABILITY	3.4	5	4.0	5
MODERNIZATION	9.9	16	12.7	16
FORCE STRUCTURE	15.3	25	24.9	31
TOTAL	62.0	100	80.7	100

READINESS, AS THE TOP PRIORITY PROGRAM, SHOWS CONTINUED GROWTH IN FY 1983 AND RECEIVES THE LARGEST AMOUNT OF BUDGET DOLLARS. SUSTAINABILITY AND MODERNIZATION REMAIN RELATIVELY STABLE IN TERMS OF THEIR SHARE OF TOTAL DOLLARS. THE BIGGEST INCREASE, $9.7 BILLION, OCCURS IN FORCE STRUCTURE.

FY 1983 REPRESENTS A SIGNIFICANT YEAR OF GROWTH FOR THE NAVY. REAL PROGRAM GROWTH IN TOA AMOUNTS TO 21.5 PERCENT FOR THE NAVY BUDGET. THAT GROWTH MUST BE PUT INTO PERSPECTIVE HOWEVER. FOR ONE THING, THE GROWTH IS CRITICALLY NEEDED TO MAKE UP FOR THE PAST SHORTCOMINGS I MENTIONED EARLIER. IN ADDITION, THERE ARE SEVERAL UNIQUE FACTORS TO BE CONSIDERED IN ORDER TO HAVE AN UNDERSTANDING OF THE UNUSUAL GROWTH IN FY 1983. FIRST, NAVY IS BUDGETING FOR TWO CVNs IN FY 1983 VERSUS THE FORMER PLAN OF ONE EACH IN FY 1984 AND FY 1986. THIS REVISED PLAN ACHIEVES BOTH REDUCED COSTS AND EARLIER DELIVERY. SECOND, THE FY 1982 PROGRAM CONTAINS NO TRIDENT SSBN'S WHILE FY 1983 HAS TWO. THESE PROGRAMS ACCOUNT FOR 13.5 PERCENT OF NAVY'S REAL GROWTH. LEAVING THOSE TWO PROGRAMS ASIDE, NAVY REAL PROGRAM GROWTH IS 8.0 PERCENT. ANOTHER 4.1 PERCENT OF REAL GROWTH IS ATTRIBUTABLE TO CHANGES IN BUDGETING AND TO NAVY SUPPORT OF MARINE CORPS PROGRAMS. AFTER ALLOWING FOR THOSE CONSIDERATIONS, THE REMAINING REAL GROWTH IN NAVY PROGRAMS IS ABOUT 3.9%.

LET ME BRIEFLY ADDRESS THIS MATTER OF REAL PROGRAM GROWTH FOR THE NAVY BUDGET IN ANOTHER WAY. REAL PROGRAM GROWTH CAN BE ASSESSED IN TERMS OF BUDGET OUTLAYS RATHER THAN TOA (TOTAL OBLIGATIONAL AUTHORITY). IN OUTLAY TERMS, THE DEPARTMENT OF THE NAVY REAL PROGRAM GROWTH FOR FY 1983 IS 9.9%. THE NAVY ESTIMATE, NOT INCLUDING NAVY RESOURCES THAT SUPPORT THE MARINE CORPS PROGRAMS AMOUNTS TO 9.2% FOR FY 1983 AND RESULTS IN AN AVERAGE OF 5.6% REAL GROWTH OVER THE PERIOD FY 1981 - 1983. IN AS MUCH AS THE OVERALL DOD GROWTH IS 10.5%, IT IS CLEAR THAT THE MARITIME SUPERIORITY STRATEGY IS NOT ADVERSELY IMPACTING ON OTHER SERVICE NEEDS, CONTRARY TO POPULAR BELIEF.

STRATEGIC FORCES

THE FY 1983 BUDGET APPLIES ROUGHLY 7.8 PERCENT OF THE NAVY'S RESOURCES TO STRATEGIC WARFARE. THIS PERCENTAGE WILL INCREASE OVER THE NEXT FIVE YEARS AS WE ADD A NUMBER OF TRIDENT SUBMARINES, CURRENTLY PROGRAMMED AT SIX MORE, AND PROVIDE FOR THEIR MODERNIZATION WITH THE DEVELOPMENT OF THE TRIDENT II, D-5

MISSILE. THE D-5 WILL PROVIDE NOT ONLY THE OPPORTUNITY TO GREATLY IMPROVE OUR RANGE AND PAYLOAD, BUT ALSO THE ACCURACY PREVIOUSLY AVAILABLE ONLY IN LAND-BASED ICBM SYSTEMS. OUR STRATEGIC PROGRAM ALSO MAKES SIGNIFICANT STRIDES IN THE STRATEGIC COMMAND, CONTROL AND COMMUNICATIONS NETWORK.

FORCE STRUCTURE

ONE OF THE MOST ENCOURAGING DEVELOPMENTS IN THE FY 1983 BUDGET AND FIVE YEAR PLAN IS THE MAJOR TURN-AROUND IN THE SHIPBUILDING AND AIRCRAFT PROCUREMENT PROGRAMS, WHICH CONTRAST SHARPLY WITH THOSE SUBMITTED IN THE PAST SEVERAL YEARS.

WE ARE PROPOSING NEW CONSTRUCTION OF 133 SHIPS OVER THE NEXT FIVE YEARS. OF THESE, 60 WILL BE MAJOR COMBATANTS. A SHIP CONSTRUCTION PROGRAM OF THIS SIZE CARRIED TO ITS CONCLUSION WILL ASSURE THE SUSTAINED GROWTH OF THE FLEET BEYOND THE 556 SHIP LIMIT OF PREVIOUS PLANS. A MAJOR FEATURE OF OUR BUDGET IS OUR REQUEST FOR TWO LARGE DECK, NUCLEAR-POWERED AIRCRAFT CARRIERS (CVN). BY CONTRACTING FOR TWO CVN'S IN TANDEM, WE ARE AIMING FOR MAJOR PRODUCTION AND PROCUREMENT ECONOMIES AND EXPECT TO SHORTEN THE NORMAL SEVEN YEAR PRODUCTION TIME BY ABOUT TWO YEARS. THESE NEW CVN'S WILL ENABLE US TO ATTAIN A FORCE OF 14 CARRIERS. OTHER NEW COMBATANT SHIPS INCLUDE TWO LOS ANGELES CLASS NUCLEAR ATTACK SUBMARINES, THREE CG-47 AEGIS CLASS CRUISERS AND TWO PERRY CLASS FRIGATES.

REACTIVATION OF THE REMAINING THREE IOWA-CLASS BATTLESHIPS IS PLANNED OVER THE NEXT THREE YEARS AND OUR BUDGET PROVIDES FOR REACTIVATION OF THE SECOND. EACH OF THESE WILL BE EQUIPPED WITH BOTH HARPOON AND TOMAHAWK MISSILES. NEW CONSTRUCTION LOS ANGELES CLASS SUBMARINES WILL BE TOMAHAWK CAPABLE, BEGINNING WITH SSN-719 SCHEDULED TO DELIVER IN FY 1985. IN ADDITION, THE CG-47 AND DD-963 DESIGNS ARE BEING MODIFIED TO INCLUDE TOMAHAWK IN VERTICAL LAUNCHER SYSTEMS (VLS).

MARINE CORPS AMPHIBIOUS ASSAULT IS UNIQUE -- IT IS THE ONLY U.S. CAPABILITY TO INSERT AND SUSTAIN SIGNIFICANT NUMBERS OF HEAVY LAND FORCES ASHORE IN A HOSTILE ENVIRONMENT. ADEQUATE, SURVIVABLE AMPHIBIOUS LIFT IS ESSENTIAL.

- FACED WITH THE POTENTIAL FOR SIGNIFICANT BLOCK OBSOLESCENCE OF OUR AMPHIBIOUS FORCE IN THE 1990S, WE HAVE PURSUED TWO SEPARATE SHIP CONSTRUCTION PROGRAMS IN THIS YEAR'S PLAN. CONSTRUCTION OF EIGHT LSD-41S AND INTRODUCTION OF A NEW CLASS - LHD-1 WILL ALLOW US TO BEGIN REPLACEMENT OF AGING SHIPS WITH MODERN VESSELS THAT CAN BETTER ACCOMMODATE THE TYPE OF EQUIPMENT THE MARINE CORPS WILL NEED TO ACCOMPLISH ITS WORLDWIDE MISSION. OUR PROCUREMENT PROGRAM MAKES SOME PROGRESS TOWARD INCREASING OUR LIFT CAPACITY TO THAT REQUIRED FOR SIMULTANEOUS MOVEMENT OF A MARINE AMPHIBIOUS FORCE (MAF) PLUS A MARINE AMPHIBIOUS BRIGADE (MAB).

CONSTRUCTION OF MINE WARFARE SHIPS PROVIDING DEEP OCEAN COUNTERMEASURES CAPABILITIES CONTINUES WITH FUNDING REQUESTED FOR 4 UNITS IN FY 1983 AND 9 ADDITIONAL OVER THE PROGRAM YEARS.

THE PRINCIPAL ADVANTAGE OF THE U.S. NAVY OVER ALL POTENTIAL ADVERSARIES IS OUR DOMINATION OF THE AIR. MUCH EMPHASIS HAS BEEN PLACED ON PRESERVING AND ENHANCING OUR SUPERIORITY IN THIS AREA. FIGHTER AND ATTACK AIRCRAFT FORCE LEVELS WILL BE EXPANDED AS A RESULT OF OUR PROCUREMENT PLANS. THIS YEAR'S PLAN REPRESENTS NEARLY A THREE-FOLD INCREASE OVER WHAT WE WERE ABLE TO ACHIEVE FROM FY 1977 THROUGH 1981. NAVY AND MARINE CORPS SQUADRONS WILL BE MODERNIZED WITH THE INTRODUCTION OF THE F/A-18 HORNET IN LARGE NUMBERS. INCREASED PROCUREMENT OF THE MARINE CORPS AV-8B IS FUNDED.

OUR AIRCRAFT PROCUREMENT PLAN IS MORE THAN 75 PERCENT LARGER THAN THE ONE SUBMITTED LAST JANUARY, PROVIDING PROCUREMENT FOR ROUGHLY 1,900 AIRCRAFT INCLUDING 288 IN THE BUDGET BEFORE YOU. FOR THE FIRST TIME AS CNO, I AM ABLE TO REPORT TO YOU THAT OUR FIVE YEAR PLAN PROVIDES PROCUREMENT OF MORE AIRCRAFT THAN WE EXPECT TO LOSE THROUGH ATTRITION OR RETIREMENT. PROCUREMENT AT THESE LEVELS IS NEEDED IF WE ARE TO PROVIDE FOR THE CONTINUED MODERNIZING OF EXISTING AIR WINGS, AND TO "STAND UP" A THIRTEENTH WING IN FY 1983 AND A FOURTEEN BY FY 1987. IN MY JUDGMENT, THE FUTURE OF NAVAL AVIATION IS BRIGHT AND WE SHOULD CONTINUE TO DOMINATE MARITIME AIRSPACE FOR THE REMAINDER OF THE DECADE AND BEYOND.

THE DETAILS OF OUR SHIP AND AIRCRAFT PLANS ARE APPENDED TO THIS STATEMENT IN TABULAR FORM. THE STRENGTH OF THESE PLANS LIES NOT JUST IN THE NUMBER OF

PLATFORMS TO BE PROCURED, BUT MORE IMPORTANTLY IN THE BROAD QUALITATIVE IMPROVEMENTS THEY PROVIDE TO OUR TOTAL WARFIGHTING CAPABILITIES. I AM SATISFIED THAT OUR SHIP AND AIRCRAFT PROCUREMENT PLANS WILL PROVIDE FOR MUCH NEEDED IMPROVEMENTS, AND THEY WILL ADD SIGNIFICANTLY TO OUR ABILITY TO MEET THE UNIQUE DEMANDS OF MARITIME WARFARE.

MILITARY MANPOWER

THERE IS MUCH GOOD NEWS TO SHARE WITH THE CONGRESS THIS YEAR WITH RESPECT TO THE MILITARY MANPOWER SITUATION IN THE NAVY, IN STARK CONTRAST TO THE ALARM I REGISTERED WITH YOU DURING THE 1979 AND 1980 CONGRESSIONAL HEARINGS. YOU WILL RECALL THAT WE WERE EXPERIENCING THE POOREST RETENTION IN YEARS, AND MORE AND MORE SHIPS AND AVIATION SQUADRONS WERE REPORTING C-4 READINESS, DUE ALMOST SOLELY TO THE ABSENCE OF SUFFICIENT NUMBERS OF QUALIFIED PERSONNEL. ONE COMMANDING OFFICER SO SHORT OF REQUIRED TALENT EVEN REFUSED TO GET UNDERWAY. WHAT A DIFFERENT PICTURE WE SEE TODAY. IT IS A PLEASURE INDEED TO BE ABLE TO REPORT TO CONGRESS THAT IN THE LAST 14 MONTHS, OR SO, THERE HAS BEEN A MAJOR TURNAROUND IN THE ATTITUDE, MORALE, AND RETENTION OF OUR EXPERIENCED CAREERISTS, IN LARGE MEASURE AS A RESULT OF CONGRESSIONAL SUPPORT.

IN MY JUDGMENT, THERE ARE THREE PRINCIPAL REASONS FOR THIS CHANGE IN DIRECTION.

- FIRST, FOR THE PAST 18 MONTHS OR SO THERE HAS BEEN A GROWING AWARENESS ON THE PART OF THE AMERICAN PUBLIC IN FAVOR OF PERSONNEL SERVING THEIR NATION IN UNIFORM THUS FOSTERING A SENSE OF AWARENESS AND APPRECIATION THAT HAS NOT BEEN FELT BY MILITARY PEOPLE FOR MANY YEARS. IN HIS RECENT STATE OF THE UNION ADDRESS THE PRESIDENT DECLARED THAT MILITARY PEOPLE ARE PROUD TO WEAR THEIR UNIFORMS AGAIN. HE IS SO VERY RIGHT.

- SECOND, AND SURELY MOST IMPORTANTLY, HAS BEEN THE COMBINED EFFECT OF THE TWO MILITARY PAY BILLS WHICH WERE ENACTED BY THE CONGRESS IN 1980, AND AGAIN LAST YEAR IN THE 1982 BILL. THE EFFECTS OF INCREASED BASIC PAY TO LEVELS WHICH APPROACH THOSE THAT EXISTED AT THE TIME OF THE CREATION OF THE ALL-VOLUNTEER FORCE, THE NEW VARIABLE HOUSING ALLOWANCE, THE SEA PAY PROVISIONS, THE WILLINGNESS TO REIMBURSE MILITARY PERSONNEL FOR DIRECTED MOVES FROM ONE STATION TO ANOTHER AND THE IMPROVEMENTS TO SELECTED REENLISTMENT BONUS HAVE ALL HAD DRAMATIC IMPACT.

- AND THIRD, THE LEADERSHIP IN THE NAVY THROUGH THE CHAIN OF COMMAND HAS BEEN DOING A VERY IMPRESSIVE JOB OF RUNNING THE NAVY RIGHT. ATTRITION IS DOWN; DESERTION IS DOWN MORE THAN 30 PERCENT OVER THE LAST TWO YEARS; AND ATTITUDES ARE UP IN EVERY CATEGORY. SEA DUTY EXTENSIONS INCREASED 58 PERCENT LAST YEAR OVER 1980 AND REQUESTS FOR SEA DUTY AS A REENLISTMENT INCENTIVE ROSE 33 PERCENT. THESE ARE SIGNIFICANT AND HEALTHY INDICATORS.

MY FINAL OBSERVATION WITH RESPECT TO MILITARY PERSONNEL IS TO REEMPHASIZE THE TREMENDOUS ADMIRATION THAT I HOLD FOR OUR NAVY PEOPLE TODAY -- FOR WHAT THEY ARE DOING FOR THIS COUNTRY. WE CONTINUE TO ASK THEM TO GO ON 7 AND 8-MONTH CRUISES. WE CONTINUE TO DEMAND THAT THEY WORK EXTRAORDINARY HOURS BECAUSE OF THE SHORTAGE OF TALENT WITHIN A GIVEN UNIT. WE CONTINUE TO ORDER THEM TO THE INDIAN OCEAN FOR PERIODS OF 50 AND 60 DAYS AT A TIME WITHOUT ANY SHORE LIBERTY. WE CONTINUE TO EXPECT THEM TO BE COMPLETELY RESPONSIVE TO ANY CONTINGENCY THAT MIGHT OCCUR AROUND THE GLOBE, AND THEY ARE. THEY MEET EVERY CHALLENGE WITH INSPIRED PROFESSIONALISM THAT BRINGS GREAT PERSONAL PRIDE TO ME AS CHIEF OF NAVAL OPERATIONS. IT HELPS ME STAND A BIT TALLER EVERY DAY.

THE SUPPORT THAT YOU HAVE GIVEN THEM IN THE PAST HAS BEEN CRUCIAL. THAT SUPPORT MUST CONTINUE -- MUST NOT WITHER -- MUST NOT RECEDE IN THE HEAT OF BUDGET DEBATES. WITHOUT CONTINUED CONGRESSIONAL SUPPORT, WE CANNOT HOPE TO ELIMINATE THE PRESENT DEFICIT IN TRAINED, EXPERIENCED MANPOWER. WITH CONGRESSIONAL SUPPORT, WE CAN BE COMPLETELY OPTIMISTIC ABOUT OUR ABILITY TO MAN THE GROWING NAVY THAT IS SO VITAL TO OUR DEFENSE POSTURE.

PROSPECTS FOR IMPROVEMENTS

IN PREVIOUS TESTIMONY BEFORE THE CONGRESS, I HAVE BEEN COMPELLED TO POINT OUT THAT THE FIRST TWO BUDGETS OF MY TENURE, 1979 AND 1980, ESTABLISHED DATA POINTS THAT TENDED IN THE DIRECTION OF CERTAIN AND IRREVERSIBLE MARITIME

INFERIORITY IF CONTINUED. WHEN THE 1982 BUDGET WAS ASSEMBLED AND SUBMITTED A YEAR AGO, I WAS PLACED IN THE MOST UNCOMFORTABLE POSITION OF BEING UNABLE TO SUPPORT THAT BUDGET BECAUSE IT WOULD HAVE MARKED YET ANOTHER, THE THIRD, DATA POINT IN THE SAME UNACCEPTABLE TREND, PERPETUATING THE DOWNWARD SPIRAL TOWARDS CAPITULATION TO THE SOVIET NAVAL CHALLENGE. HAPPILY, ONE YEAR LATER I CAN POINT TO TWO NEW DATA POINTS: THE 1982 BUDGET AS AMENDED BY THE NEW ADMINISTRATION, AND THE PROPOSED FY 1983 BUDGET WHICH IS BEFORE YOU.

FROM ALL APPEARANCES, THE MESSAGE HAS BEEN RECEIVED -- THE "SENSE OF CONGRESS" RESOLUTION FOR A 600 SHIP NAVY FORTUITOUSLY FINDS ITSELF IN CONGRUENCE WITH THE NEW POLICY OF THE EXECUTIVE BRANCH, WHICH GIVES ONE CONSIDERABLE HOPE THAT WE HAVE TURNED THE CORNER, THAT WE ARE WELL ALONG THE ROAD TOWARDS REBUILDING REQUIRED NAVAL STRENGTH. GIVEN THE COMMITMENT TO MAINTAIN THIS IMPETUS OVER THE REMAINDER OF THIS DECADE, I AM NOW ENCOURAGED THAT I WILL BE ABLE TO TURN OVER TO MY SUCCESSOR A NAVY THAT HAS MOMENTUM, BUILDING TOWARDS A GOAL OF 15 CARRIER BATTLE GROUPS, 4 BATTLESHIPS (WHICH IN THEMSELVES PROVIDE A UNIQUE OPPORTUNITY TO CREATE FLEXIBLE SURFACE ACTION BATTLE GROUPS) A FORCE STRUCTURE OF 100 OR MORE NUCLEAR ATTACK SUBMARINES, ENHANCED AND MODERNIZED AMPHIBIOUS FORCES, A REVITALIZED AND MODERNIZED MINE WARFARE FORCE, AN ENHANCED SEALIFT CAPABILITY WHICH FOR THE FIRST TIME IN DECADES WILL GIVE US THE ABILITY TO RESPOND FLEXIBLY AND PROMPTLY WHEREVER NECESSARY AROUND THE GLOBE, AND AN EFFECTIVE MARITIME PREPOSITIONING FORCE. TAKEN TOGETHER, THESE PROGRAMS, PROPERLY SUPPORTED AND MAINTAINED, SHOULD ASSURE THAT MY SUCCESSOR'S SUCCESSOR WILL SEE THE RESTORATION OF U.S. MARITIME SUPERIORITY AROUND THE GLOBE, REGARDLESS OF SOVIET ACHIEVEMENTS IN THE MEANTIME.

I AM ACUTELY AWARE THAT WE ARE ASKING YOU AND THE PUBLIC TO SUPPORT A LARGE INCREASE IN THE NUMERICAL AND QUALITATIVE STRENGTH OF THE UNITED STATES NAVY. BUT IT IS ESSENTIAL THAT THIS BE DONE ON AN EXPEDITED AND CONTINUING BASIS. I AM CONFIDENT THAT THIS RENAISSANCE OF EMPHASIS ON MARITIME STRENGTH AND STRATEGY REPRESENTS, IN ITS MOST BASIC TERMS, A RECOGNITION BY THE AMERICAN PEOPLE AND BY THEIR ELECTED REPRESENTATIVES, OF WHAT IS REQUIRED TO ASSURE THE PROTECTION OF THIS COUNTRY'S MOST FUNDAMENTAL INTERESTS.

THE CONGRESS WILL DETERMINE THE ULTIMATE SIZE AND QUALITY OF THE NAVY WE WILL HAVE. BUT THE NAVY IS FULLY SENSITIVE TO OUR RESPONSIBILITY TO THE TAXPAYER TO SPEND OUR ALLOCATED RESOURCES EFFICIENTLY. WHATEVER THE SIZE OF THE FLEET THAT RESULTS, YOU CAN BE SURE THAT WE WILL DO EVERYTHING IN OUR POWER TO MAKE IT A FIRST CLASS, PROFESSIONAL NAVY -- ONE THAT IS READY, SUSTAINABLE, AND MANNED BY THE MOST HIGHLY TRAINED AND DEDICATED MEN AND WOMEN.

ATTACHMENT 1

DEPARTMENT OF THE NAVY
FIVE-YEAR PLAN
AIRCRAFT PROCUREMENT
NUMBER OF AIRCRAFT

A/C	83	84	85	86	87
A-6E	8	8	12	12	12
EA-6B	6	6	6	6	6
F-14A	24	30	30	30	30
AV-8B	18	30	48	60	60
F/A-18	84	96	108	132	132
SH-2F	18	18	18	18	-
CH-53E	11	11	11	14	14
SH-60B	48	64	74	-	-
SH-60 (CV Var)	-	-	-	64	64
AH-IT	-	22	22	-	-
P-3C	6	5	5	5	5
E-2C	6	6	6	6	6
UC-12B	-	-	12	12	37
C-2	8	8	8	8	7
T-44	-	-	-	15	-
HXM	-	-	-	-	6
T-34C	30	28	28	28	30
TH-57	21	21	-	-	-
C-9	-	2	2	2	2
F-5E	-	4	4	4	4
VTX	-	-	-	12	24
ECX	-	-	3	3	3
TOTAL	288	359	397	431	442

ATTACHMENT 2

SHIPBUILDING AND CONVERSION
NUMBER OF SHIPS

NEW CONST	83	84	85	86	87
TRIDENT	2	1	1	1	1
CVN	2	-	-	-	-
SSN-688	2	3	4	4	4
CG-47	3	3	3	4	4
DDG-51	-	-	1	-	3
CGN-42	-	-	-	-	1
DD-963	-	-	-	2	1
LSD-41	1	1	2	2	2
LHD-1	-	1	-	-	1
LPDX	-	-	-	-	-
FFG-7	2	2	2	3	3
MCM	4	4	5	-	-
MSH-1	-	1	-	5	5
AD	-	-	-	1	1
TAO	1	3	4	4	6
AGOS	-	1	-	2	3
AE	-	-	1	2	1
TARC	-	-	-	1	-
ARS	1	1	-	-	-
AOE	-	-	1	1	2
SUBTOTAL-NEW CONSTRUCTION	18	21	24	32	38
CONVERSION/REACTIVATIONS					
CV SLEP	1	-	1	-	1
BB (React)	1	1	1	-	-
TAGS (Conv)	-	-	2	-	-
TAGM (Conv)	-	-	-	1	-
TAHX (C) (Acq)	1	1	-	-	-
TAKRX	4	-	-	-	-
TAK (FBM) (C)	-	-	1	-	-
TOTAL	25	23	29	33	39

PREPARED STATEMENT OF REAR ADM. RICHARD A. MILLER

DIRECTOR OF OFFICE OF BUDGET AND REPORTS

AND

DIRECTOR OF FISCAL MANAGEMENT DIVISION

BUDGET OFFICER'S STATEMENT

Mr. Chairman and Members of the Committee:

It is my pleasure to appear before you today to present an overview of the Department of the Navy's proposed budget for Fiscal Year 1983.

The Department of the Navy budget totals $88,022.3 million in FY 1983 compared to 67,964.8 million of FY 1982. Outlays amount to $66,634.9 million, $10,910.2 over those of FY 1982. The budget request is summarized below.

DEPARTMENT OF THE NAVY
FY 1983 BUDGET
SUMMARY
(In Millions of Dollars)
1/

	FY 1982	FY 1983	Increase	%
DON TOA	67,964.8	88,022.3	+20,057.5	+29.5%
NAVY (TOA)	62,016.5	80,737.6	+18,721.1	+30.2%
MARINE CORPS (TOA)	5,948.3	7,284.7	+ 1,336.4	+22.5%
DON OUTLAYS	55,724.7	66,634.9	+10,910.2	+19.6%

1/ Includes program supplemental but not the October 1981 pay raise amount, which will be submitted in March 1982.

Real Program Growth

FY 1983 represents a significant year of real growth for the Department of the Navy budget, but taken in historical perspective, this budget growth is critical to overcoming previous underinvestment in naval forces.

Indeed, as the following percentages illustrate, the requested level of spending for the Department of the Navy in FY 1983 is below the levels of the 1950's and 1960's relative to the Gross National Product (GNP).

	FY 1955	FY 1960	FY 1970	FY 1983
DON OUTLAYS % OF GNP	2.3%	2.3%	2.4%	1.9%

That is to say, in FY 1983, DON outlays of $66.6 billion represent only 1.9% of GNP while, in FY 1955, outlays accounted for 2.3% of GNP.

There are several major elements of the Navy budget which account for the unique real program growth of $20.6% in FY 1983. First, Navy is budgeting for two CVNs in FY 1983 versus the original plan of one each in FY 1984 and FY 1986 in order to achieve both reduced costs and earlier delivery. Second, in FY 1982, which is the base year for calculating FY 1983 growth, there are no TRIDENT SSBNs while FY 1983 has two. These programs account for 11.4% of DON's real program growth. The remaining real program growth is 9.2%. Of that 9.2% growth figure, 4.2% is attributable to budgeting changes, such as the transfer of Family Housing costs from DOD to the Services; to budgeting for increased production rates in order to reduce unit costs; and to the increase in funding required to budget to most likely cost. After allowing for these singular considerations, the remaining real program growth is about 5.0%. These major factors contibuting to real program growth are depicted numerically in the following table for fiscal years 1982 through 1984.

DEPARTMENT OF THE NAVY
REAL PROGRAM GROWTH
(IN MILLIONS OF DOLLARS)

	FY 1982	FY 1983	FY 1984
CURRENT DOLLARS	67,965	88,022	87,802
CONSTANT DOLLARS (FY 1983)	74,062	89,339	85,427
REAL PROGRAM GROWTH	+12.4%	+20.6%	-4.4%
CHANGES IN BUDGETING		4.2%	
REMAINING RPG		+16.4%	
CVN PROGRAM		8.5%	
REMAINING RPG		+7.9%	
TRIDENT PROGRAM		2.9%	
REMAINING RPG		+5.0%	

The recent history of real program growth for the Department of the Navy budget from FY 1977 through FY 1984 provides some historical perspective on the size and direction of the Department of the Navy budget in this Administration.

DEPARTMENT OF THE NAVY
REAL PROGRAM GROWTH
FY 1977 - FY 1984

FISCAL YEAR	RATE
1977	+7.2%
1978	-
1979	-2.2%
1980	+1.3%
1981	+9.6%
1982	+12.4%
1983	+20.6%
1984	-4.4%

The gain in real program growth in FY 1982 and FY 1983 is in sharp contrast to the experience in previous years. Likewise, the negative projection for FY 1984 indicates that much of the growth in FY 1983 is attributable to one-time factors, such as the proposed procurement of 2 CVNs and 2 Trident submarines, as previously discussed.

The following graph illustrates the trends of the Department of the Navy budget in TOA and Outlays from FY 1977 to FY 1984.

DEPARTMENT OF THE NAVY
BUDGET TOTALS

(GRAPH A)

As the graph shows, the increase in TOA from $68 billion in FY 1982 to $88 billion in FY 1983 represents something of an anomaly in the growth pattern of DON TOA. The unique carrier and Trident submarine programs and the one-time budgeting changes in FY 1983 bring about an unusually large increase in TOA for FY 1983. As the graph also indicates, this TOA growth phenomenon does not appreciably affect outlays for FY 1983. The growth in outlays from FY 1982 to FY 1984 is almost a straight line.

Having looked at growth in terms of both TOA and outlays for the Department of the Navy as a whole, let us narrow the scope a bit and focus on appropriation categories. This next graph displays the trends of real growth since FY 1977 in the major DON appropriation categories.

DEPARTMENT OF THE NAVY
BUDGET TRENDS
CONSTANT DOLLARS (FY 1983)

(GRAPH B)

This graph demonstrates that most of the real growth in the Department of the Navy between FY 1981 and FY 1983 has been in the investment accounts. However, while the investment category (including all procurement and Military Construction) grows dramatically, one can readily see that all five appropriation categories increase in FY 1983. In other words, the large increase in our investment category is not being accomplished at the expense of readiness, which is largely provided by the operating accounts.

FY 1982 Supplemental Request

In previous tables and graphs, we looked at overall trends in our budget presentation. Now, for the moment, I will concentrate on FY 1982, and on some of the changes we are proposing for that year. A summary of the revised estimates for FY 1982 is shown below:

REVISED ESTIMATES
FY 1982
(IN MILLIONS OF DOLLARS)

APPROPRIATION ENACTED	67,590
PROGRAM SUPPLEMENTAL	746
TRANSFERS	-370
REVISED FY 1982 BUDGET	67,965
(FY 1982 PAY RAISE)	(1,685)

These revisions include a program supplemental request of $746 million and a negative adjustment of $370 million for appropriation transfers. The transfers include: $300 million to the Coast Guard from the SCN appropriation as directed by Congress; $6.8 million from O&M,MC to Foreign Currency, Defense Agencies; a net transfer from O&M,N of $26.4 million; and $37.2 million from RDT&E,N to finance partially the program supplemental.

In addition, we are requesting appropriations for two other purposes not shown in the above table. The first is a request for $43.6 million to liquidate the contract authority that was used when the R.S. 3732 authority was involved in FY 1980 for the O&M,N appropriation. The other is a request for extension of the availability of the FY 1978 SCN appropriation by two years, which in a technical budget sense requires the reappropriation of $343.7 million of the unobligated balances of that appropriation. This request is necessary to allow us to continue obligating funds previously appropriated to complete the ships that were included in that appropriation.

The following table shows the makeup of the FY 1982 supplemental request of $745.7 million by appropriation.

FY 1983 Department of Navy Budget
FY 1982 Program Supplemental
TOA ($ in Thousands)

	TOTAL
MILITARY PERSONNEL, NAVY	154,200
MILITARY PERSONNEL, MARINE CORPS	50,700
RESERVE PERSONNEL, MARINE CORPS	2,800
TOTAL MILPERS	207,700
OPERATION & MAINTENANCE, NAVY	229,100
OPERATION & MAINTENANCE, MARINE CORPS	25,300
OPERATION & MAINTENANCE, NAVY RESERVE	200
TOTAL O&M	254,600

	TOTAL
SHIPBUILDING & CONVERSION, NAVY	263,400
PROCUREMENT, MARINE CORPS	20,000
TOTAL PROC.	283,400
GRAND TOTAL DON	745,700

The supplemental request for FY 1982 in the Military Personnel Appropriations amounts to $207.7 million. It will permit payment of increased personnel entitlement costs, primarily for the Variable Housing Allowances ($37.1 million). It also provides funding for new discretionary entitlements to be effective on 1 April 1982 which totals $93.5 million, including diving duty pay, selective reenlistment bonuses and temporary lodging expenses as well as the increases in the basic allowance for subsistence under the provision of the Defense Officer Personnel Management Act. An additional $77.1 million is needed in the military personnel accounts to fully fund the previously approved Navy and Marine Corps end-strength levels and entitlements during FY 1982. Without these additional funds the Navy will be forced to make sizeable reductions in strength levels, bonus programs, and PCS moves. Such reductions would aggrevate Navy's petty officer shortfall, offset overall retention (currently at a very high level because of Congressionally approved compensation initiatives) and ultimately would affect fleet manning and overall readiness.

The supplemental request for the Operation and Maintenance accounts totals $254.6 million. Increased utility costs, postal costs and higher health benefit costs account for $70.3 million of that total. An additional $90.0 million will permit substantial progress in reducing the persistent backlog of real property maintenance at our military facilities. Another $21.6 million of this supplemental covers programs transferred from other government agencies in the amount of $69.4 million, such as the Veterans Educational Assistance Program (VEAP), and Unemployment Compensation costs. Finally, an additional $72.7 million is requested including $58.6 million for the LEASAT Communications Satellite, $10.8 million to eliminate inequities in payment of per diem costs and $3.3 million to support certain Public Health Service hospitals.

For the Shipbuilding and Conversion, Navy appropriation, $263.4 million is requested in this supplemental. Of that amount, $183.4 million covers increased costs for the TRIDENT submarine program, the FY 1982 Fleet Oiler and Mine Countermeasures Ships. An additional $80.0 million is requested for the cost of awarding one of the FY 1982 program CG-47 cruisers to a second source builder.

Finally, $20.0 million is requested for Procurement, Marine Corps to provide for the procurement of 230 logistics vehicle systems, a family of combat support and service vehicles for the Marine Corps.

Changes by Appropriation (FY 1982-FY 1983)

Turning again to the FY 1983 budget proposal, changes by appropriation from FY 1982 to FY 1983 are displayed next. As mentioned earlier, by far the largest dollar increases occur in the procurement accounts. Shipbuilding and Conversion (SCN), in particular, grows by $9.7 billion, for an increase of 109.5% over FY 1982, and Aircraft Procurement (APN) gains by $2.4 billion over the $9.1 billion of FY 1982. Major increases are also seen in the Operation and Maintenance, Navy ($2.6 billion) and the Military Personnel, Navy ($1.3 billion) accounts. All of these appropriations will be discussed later in detail.

DEPARTMENT OF THE NAVY
CHANGES BY APPROPRIATION
FY 1982-FY 1983
(IN MILLIONS OF DOLLARS)

APPROPRIATION	FY 1982	FY 1983	FY 82-83	%
MPN	9,272.2	10,578.9	+1,306.7	+14.1
MPMC	2,817.7	3,276.1	+458.4	+16.3
RPN	346.7	641.3	+294.6	+85.0
RPMC	141.5	165.9	+24.4	+17.2
O&MN	19,588.6	22,165.8	+2,577.2	+13.2
O&MMC	1,204.0	1,481.8	+277.8	+23.1
O&MNR	571.1	653.0	+81.9	+14.3
O&MMCR	40.3	48.4	+8.1	+20.1
APN	9,140.0	11,582.3	+2,442.3	+26.7
WPN	3,215.1	3,901.6	+686.5	+21.4
SCN	8,902.3	18,648.3	+9,746.0	+109.5
OPN	3,676.6	3,970.2	+293.6	+8.0
PMC	1,731.5	2,300.7	+569.2	+32.9
RDT&E	5,807.1	6,232.3	+425.2	+7.3
MCN	1,451.4	1,208.3	-243.1	-16.7
MCNR	36.0	25.2	-10.8	-30.0
FHN&MC	-*	776.0	+776.0	-
NSF	9.4	354.4	+345.0	+3,670.2
MCSF	13.3	11.8	-1.5	-11.3
TOTAL DON	67,964.8	88,022.3	+20,057.5	+29.5
NAVY	62,016.5	80,737.6	+18,721.1	+30.2
MARINE CORPS	5,948.3	7,284.7	+1,336.4	+22.5

*$592.2 million was in Defense Agencies budget.

Composition of DON Forces

Comparisons of significant force data, which relate to the budget for fiscal years 1982 through 1984, are displayed in the next table. Active military personnel end strength for the DON is budgeted at 763,800 in FY 1983, reserve strength at 143,800, including 11,828 Navy Reservists on active duty, and civilian personnel end strength at 320,572. The proposed FY 1983 budget will support deployable battle forces of 535 ships and an average operating inventory of 4,772 aircraft. Marine Corps divisions and air wings remain at three each for active forces and one each for the reserves.

DEPARTMENT OF THE NAVY
SIGNIFICANT FORCE DATA

	FY 1981	FY 1982	FY 1983	FY 1984
ACTIVE MILITARY MANPOWER END STRENGTH	730,839	745,100	763,800	777,700
NAVY	540,219	553,000	569,200	581,300
MARINE CORPS	190,620	192,100	194,600	196,400
RESERVE MILITARY MANPOWER AVERAGE STRENGTH	123,529	128,300	143,800	145,300
NAVY	87,739	90,700	105,500*	106,200
MARINE CORPS	35,790	37,600	38,300	39,100

* INCLUDES TARS TRANSFERRED FROM MPN

DEPARTMENT OF THE NAVY
SIGNIFICANT FORCE DATA

	FY 1981	FY 1982	FY 1983	FY 1984
CIVILIAN PERSONNEL END STRENGTH	320,858	319,175	320,572	320,573
NAVY	301,055	299,029	299,935	299,635
MARINE CORPS	19,803	20,146	20,637	20,938
TOTAL BATTLE FORCES	491	514	535	552
STRATEGIC FORCES	41	38	40	41
BATTLE FORCES	397	421	437	446
SUPPORT FORCES	44	43	45	50
MAJOR MOBILIZATION FORCE	9	11	13	15
AVERAGE OPERATING AIRCRAFT	4,547	4,693	4,772	4,835
MARINE CORPS DIVISION (ACTIVE)	3	3	3	3
MARINE CORPS AIR WINGS (ACTIVE)	3	3	3	3
MARINE CORPS RESERVE DIVISION/ AIR WINGS	1/1	1/1	1/1	1/1

Increased Navy strength is required to man new ships commissioning in 1983 as well as to accomodate increased manning requirements for current ships, squadrons, and selected shore support and training activities to improve overall fleet readiness. The Navy active strength increase of 16,200 in FY 1983 is a net increase after considering the transfer of 11,828 TAR personnel to the reserve account. The increasing strength for the active duty Marine Corps will provide for increased manning of the fleet Marine Forces, resulting in improved readiness. The increase in Navy reserve personnel strength reflects the intent of Congress to increase the size of the Naval Reserve force. The increasing average strength for the Marine Corps Reserve reflects the continuation of the increase in full-time support personnel and drill pay personnel. The DON has gone to great lengths to create personnel efficiencies in order to support a larger military force with essentially the same civilian force. I will discuss this matter in greater detail later in my statement.

Total Navy Battle Forces, which will number 514 at the end of FY 1982, will total 535 by the end of FY 1983, a net increase of 21 ships and submarines. The gross number of vessels joining the Battle Forces is 24, consisting of the third TRIDENT submarine, ten frigates, four nuclear attack submarines, two auxiliaries, one destroyer, one destroyer tender, one cruiser, one fleet oiler, the reactivation of the battleship NEW JERSEY, the conversion of 1 FBM supply ship, and the Service Life Extension Program (SLEP) completion of the SARATOGA. These gains are offset by the retirement of 3 ships. By the end of FY 1984, Battle Forces are planned to grow by an additional 17 ships, consisting of eight frigates, six nuclear attack submarines, one TRIDENT submarine, one salvage ship, and one cruiser.

Average operating aircraft also increase in FY 1983 by 79 aircraft, consisting primarily of F-14A and F/A-18 fighter aircraft, and T-34Cs and TH-57s in the Training Command. These gains are offset by reductions in the numbers of F4s, A-4s and H-1 aircraft.

Budget Composition

Having covered the overall composition of DON forces, I would now like to turn to composition of the budget, first from an overall standpoint, followed by a discussion of each of the appropriation requests. A display of DON budget composition is provided in the ensuing chart.

DEPARTMENT OF THE NAVY
BUDGET COMPOSITION
FY 1983

(CHART C)

Not suprisingly, in view of the emphasis on new ship construction, SCN experiences the greatest relative growth in percentage of the DON budget, jumping from 13% of DON TOA in FY 1982 to 21% in FY 1983. The O&M accounts, on the other hand, drop to 28% of TOA from 31%, MILPERS to 17% from 19%, R&D to 7% from 9%; APN stays about the same, at 13%. It is important to note, however, that each of these accounts increase in real terms.

Before we move on to the individual appropriations, I would like to reiterate my belief that FY 1983 represents a much needed catch-up year for the Department of the Navy. As I have pointed out, the gain in FY 1983 stands out because of its uniqueness relative to what's happened in the past several years and what is expected to occur in the future. The following discussions reinforce this notion. As we have seen, the trend is for long term slow growth after FY 1983; indeed, we experience negative real program growth in FY 1984, a fact that can be readily observed in subsequent tables.

The first appropriations to be examined in detail are the military personnel accounts, for Navy and Marine Corps, which together total $14.7 billion in FY 1983. It should be noted that in each of the following four tables, the FY 1982 pay raise is treated the same; it is annualized in the FY 1983 column, but not reflected in the FY 1982 column of the FY 1983 budget submission.

Military Personnel, Navy

The FY 1983 budget request of $10,578.9 million for Military Personnel, Navy will support an end strength of 569,200 active duty personnel. The increase in strength funded in MPN provides for manning the 21 additional ships coming on line in 1983 as well as improvements in manning levels for both ships and squadrons. It also reflects the anticipated improvement in overall retention, which is based on the gains that have already occurred as a result of the compensation initiatives enacted by Congress. Additionally, provision is made for increases in various training programs as well as general shore support elements. The funding levels project the various recently approved compensation initiatives provided for by Congress. The FY 1983 funding level for MPN is $1,306.6 million higher than the budget estimate for FY 1982. A major portion of this increase ($1,073.1 million) represents the FY 1982 pay raise. The remaining net increase in funding in MPN results from increases to support the FY 1983 end strength levels, a modest increase in the Selected Reenlistment Bonus program, and growth in other segments of the account, such as 16 cents per mile versus 13 cents for member travel during Permanent Change of Station (PCS).

Provision is also made for increasing the weight allowance for household shipments. These increases are offset by decreased funding associated with the 11,828 TAR personnel who are funded in RPN in FY 1983. Appropriation details are displayed below:

DEPARTMENT OF THE NAVY
MILITARY PERSONNEL, NAVY (MPN)
(In Millions of Dollars)

	FY 1982	FY 1982 - FY 1983	FY 1983	FY 1984
PAY OF OFFICERS	2,353.0	+ 26.3	2,379.3	2,400.0
PAY OF ENLISTED	6,662.8	+105.2	6,768.0	7,013.2
PAY OF MIDSHIPMEN	32.8	+ .4	33.2	33.5
SUBSISTENCE	647.4	+ 55.8	703.2	751.2
PCS TRAVEL	644.0	+ 45.7	689.7	706.9
OTHER COSTS	5.2	+ .3	5.5	5.7
PAY SUPPLEMENTAL	-1,073.0	+1,073.0	-	-
TOTAL: MILITARY PERSONNEL, NAVY	9,272.2	+1,306.7	10,578.9	10,910.5
		END STRENGTH		
OFFICERS	67,200	+ 1,688	68,888	70,084
ENLISTED	481,275	+14,512	495,787	506,691
MIDSHIPMEN	4,525	-	4,525	4,525
TOTAL: END STRENGTH	553,000	+16,200	569,200	581,300

In FY 1984, the authorized amount for MPN is $10,910.5 million, up 3.1% over FY 1983's request as contrasted with FY 1983's 14.1% gain over FY 1982. The authorized total end strength is 581,300, an increase of 2.1% over FY 1983 compared with FY 1983's increase of 2.9% over FY 1982.

The following graph provides a visual presentation of real program growth of MPN from FY 1977 through 1984 in constant dollars, represented by the broken line. The solid line represents MPN as a percentage of the DON budget. Real program growth for this appropriation has remained fairly steady over the period shown; at the same time, MPN's share of the total DON budget has declined. Graphs similar to the one below are included for many of the appropriations.

DEPARTMENT OF THE NAVY
MILITAY PERSONNEL, NAVY (MPN)
REAL PROGRAM GROWTH

(GRAPH D)

Military Personnel Marine Corps

In the case of Military Personnel, Marine Corps, addressed in the next table, the budget request for FY 1983 is $3,276.1 million, an increase of $458.4 million over FY 1982. This request will support an end-strength gain of 2,500 composed of 537 officers and 1,963 enlisted, and provide for grade mix enrichment and longevity increases for the enlisted, an increase in the number of PCS moves (2,857 over FY 1982), and funding to cover mileage and weight allowance increases for PCS moves.

DEPARTMENT OF THE NAVY
MILITARY PERSONNEL, MARINE CORPS (MPMC)
(In Millions of Dollars)

	FY 1982	FY 1982 - FY 1983	FY 1983	FY 1984
PAY OF OFFICERS	610.2	+ 17.7	627.9	635.1
PAY OF ENLISTED	2,101.7	+ 63.0	2,164.7	2,198.6
SUBSISTENCE	216.5	+ 14.5	231.0	249.1
PCS TRAVEL	203.6	+ 46.4	250.0	262.7
OTHER COSTS	2.3	+ .2	2.5	2.6
PAY SUPPLEMENTAL	-316.6	+316.6	-	-
TOTAL: MILITARY PERSONNEL, MARINE CORPS	2,817.7	+458.4	3,276.1	3,348.1
		END STRENGTH		
OFFICERS	18,559	+ 537	19,096	19,185
ENLISTED	173,541	+ 1,963	175,504	177,215
TOTAL: END STRENGTH	192,100	+ 2,500	194,600	196,400

The authorized dollars in FY 1984 for MPMC are $3,348.1 million, an increase of 2.2% over FY 1983 compared with an increase of 16.3% in FY 1983. Total end strength rises by 1.3% in FY 1983 and 0.9% in FY 1984.

The graph below addresses real program growth for MPMC. The trends in this case are similar to the Navy military pay account.

DEPARTMENT OF THE NAVY
MILITARY PERSONNEL, MARINE CORPS (MPMC)
REAL PROGRAM GROWTH

(GRAPH E)

Reserve Personnel, Navy

Data related to Navy Reserve Personnel are shown next. The FY 1983 request is $641.3 million, up $294.6 million from FY 1982, which supports an increase of 14,800 in average Reserve strength. The primary factors related to the need for additional funds are as follows:

. an average increase of 3,370 of those reservists who perform two weeks active duty for training and 48 drill periods per year, at an estimated cost of $15 million

. a transfer of 11,828 active Navy military personnel of the TAR program from MPN to RPN, at an estimated cost of $238.4 million

. an increase in School and Special Training Tours to accommodate the training needs for the FF 1052 class ships, the first four to enter the Reserve Fleet by the end of FY 1982, and to provide increased support to the Active Fleet, at a total estimated cost of $17.4 million

. a military pay increase, effective 1 October 1981, estimated at $28.2 million

DEPARTMENT OF THE NAVY
RESERVE PERSONNEL, NAVY (RPN)
(In Millions of Dollars)

	FY 1982	FY 1982 - FY 1983	FY 1983	FY 1984
UNIT AND INDIVIDUAL TRAINING	313.2	+17.4	330.6	337.1
OTHER TRAINING AND SUPPORT	61.7	+249.0	310.7	318.7
PAY SUPPLEMENTAL	-28.2	+28.2	-	-
TOTAL: RESERVE PERSONNEL, NAVY	346.7	+294.6	641.3	655.8
		AVERAGE STRENGTH		
	90,700	+14,800	105,500	106,200

Reserve Personnel, Marine Corps

For Marine Corps Reserve Personnel, addressed below, a sum of $165.9 million is requested to fund a reserve program of 38,300 average manyears, up $24.4 million and 700 average manyears from FY 1982. The increase in the budget request is to accommodate the higher manyear level and higher rates for clothing, subsistence, and travel.

DEPARTMENT OF THE NAVY
RESERVE PERSONNEL, MARINE CORPS (RPMC)
(In Millions of Dollars)

	FY 1982	FY 82 - FY 83	FY 1983	FY 1984
UNIT AND INDIVIDUAL TRAINING	119.3	+3.2	122.5	124.9
OTHER TRAINING AND SUPPORT	35.1	+8.3	43.4	45.1
PAY SUPPLEMENTAL	-12.9	+12.9	-	-
TOTAL: RESERVE PERSONNEL, MARINE CORPS	141.5	+24.4	165.9	170.0
		AVERAGE STRENGTH		
	37,600	+700	38,300	39,100

RPMC dollars increase in FY 1983 by 17.2% over FY 1982 contrasted with FY 1984's gain of 2.5%; average strength goes up by 1.9% in FY 1983 and 2.1% in FY 1984.

That completes my discussion of the military personnel accounts. I will now turn to the operating accounts and the stock funds, which together total $24.7 billion in FY 1983, approximately 28% of the DON budget.

Operation and Maintenance, Navy

The Operation and Maintenance, Navy appropriation request of $22,165.8 million provides for an increase of $2,577.2 million when compared with FY 1982 requirements of $19,588.6 million. The FY 1982 total does not reflect the pay raise amount of $238.4 million. Fleet readiness is being emphasized, as indicated by a decrease in the backlog of ship overhauls from 16 in FY 1982 to 11 in FY 1983, a ship charter initiative to enhance our near term strategic sealift and a flying hour program, resulting in an 86% Primary Mission Readiness (PMR) level. Proposed funding for aircraft maintenance has been increased in FY 1983 to further reduce the repair backlog of airframes, engines, and components. In FY 1983 we plan to achieve our goals of 6% of airframes on extension, 36 bare firewalls and 100% of components reworked. Overall aircraft mission capable rates are expected to increase from 59% in FY 1981 to 62% in FY 1983. The Near Term Prepositioning Ships program increases by one to a total of 14 ships. The program to transfer 24 frigates to the Naval Reserve Force continues with the addition of two more in FY 1983 for a total of six. Additional O&MN details are presented in the table below and in a subsequent display of readiness factors later in the presentation.

DEPARTMENT OF THE NAVY
OPERATION AND MAINTENANCE, NAVY (O&M,N)
(IN MILLIONS OF DOLLARS)

	FY 1982	FY 1982 - FY 1983	FY 1983	FY 1984
STRATEGIC FORCES	833.4	+219.8	1,053.2	1,095.2
NAVAL FORCES	2,821.9	+381.2	3,203.1	3,364.5
TACTICAL AIR FORCES	1,571.8	-57.3	1,514.5	1,604.0
SHIP MAINTENANCE/MODERNIZATION	4,435.6	+803.9	5,239.5	5,326.2
AIRCRAFT REWORKS	1,479.8	+169.9	1,649.7	1,504.7
OTHER DEPOT MAINTENANCE	789.9	+41.4	831.3	837.4
CENTRAL SUPPLY ACTIVITIES	734.1	+55.7	789.8	833.4
LOGISTICS SUPPORT	2,262.6	+305.1	2,567.7	2,590.5
COMMUNICATIONS/INTELLIGENCE	724.8	+102.4	827.2	887.8
TRAINING AND EDUCATION	560.4	+53.6	614.0	662.8
MEDICAL	353.9	+33.1	387.0	390.8
RECRUITING AND ADVERTISING	78.0	+15.5	93.5	93.3
OTHER PERSONNEL SUPPORT	114.5	+13.0	127.5	111.4
ADMINISTRATION	335.5	+27.2	362.7	356.4
BASE OPERATIONS	2,657.4	+77.1	2,734.5	2,632.3
STRATEGIC SEALIFT	253.2	+69.0	322.2	433.0
OTHER	28.2	-11.8	16.4	38.7
INDUSTRIAL FUND/STOCK FUND SUPPORT	-208.0	+40.0	-168.0	-168.0
PAY SUPPLEMENTAL	-238.4	+238.4		
TOTAL: OPERATION AND MAINTENANCE, NAVY	19,588.6	+2,577.2	22,165.8	22,594.4

A sustained effort has been made to control costs in this area through use of more efficient work methods, reduced administrative travel, and reduction in the use of private consultants. The increase in the Strategic Forces line reflects two operational TRIDENT submarines and their support aircraft. The SSBN Force in FY 1983 will include delivery of the third TRIDENT. There will be 19 POSEIDON and 12 C-4 Backfit Missile submarines. The TAKX Convert and Charter program continues in FY 1983, and other strategic sealift components are also continued or expanded in FY 1983.

In comparing FY 1984 with prior years, it must be noted that FY 1984 does not include pay raises for either FY 1983 or FY 1984; depot maintenance backlogs were fully funded in FY 1983; and economies and efficiencies identified in FY 1983 are annualized in FY 1984.

The following graph shows real program growth for O&M,N.

DEPARTMENT OF THE NAVY
OPERATIONS AND MAINTENANCE, NAVY (O&M,N)
REAL PROGRAM GROWTH

(GRAPH F)

The O&M,N constant dollar trend shows our emphasis on readiness related items, although the relative O&M,N share of the total DON budget declines.

Operation and Maintenance, Marine Corps

The FY 1983 Operation and Maintenance, Marine Corps budget request of $1,481.8 million will support Fleet Marine Forces of three active divisions, three active aircraft wings and their combat service support units, the operation and maintenance of training bases, the Marine Corps supply system, Marine detachments and security forces, and administrative and associated activities. The FY 1983 request takes the impact of inflation into account, and provides for increases to:

- support phase 4 of the unit deployment program
- procure additional tactical equipment for Fleet Marine Forces for use in combat training and expanded exercises
- reduce the backlog of real property and depot maintenance
- support NATO and the Maritime Prepositioning Ships Program

Details are contained in this table.

DEPARTMENT OF THE NAVY
OPERATION AND MAINTENANCE, MARINE CORPS (O&MMC)
(IN MILLIONS OF DOLLARS)

	FY 1982	FY 1982 - FY 1983	FY 1983	FY 1984
DEPOT MAINTENANCE	69.9	+ 42.3	112.2	106.0
6 MONTH UNIT DEPLOYMENT	29.7	+ 5.0	34.7	36.2
FMF SUPPORT	230.3	+ 65.6	295.9	294.9
FMF LOGISTICS SUPPORT	114.1	+ 68.7	182.8	181.6
REAL PROPERTY MAINTENANCE	386.2	+ 10.0	396.2	421.9
OTHER BASE OPERATIONS	251.0	+ 36.5	287.5	307.8
TRAINING & EDUCATION	34.0	+ 8.1	42.1	40.8
ADVERTISING	12.2	+ 4.0	16.2	16.3
OTHER	89.3	+ 24.9	114.2	119.3
PAY SUPPLEMENTAL	-12.7	+12.7	-	-
TOTAL: OPERATION AND MAINTENANCE, MARINE CORPS	1,204.0	+277.8	1,481.8	1,524.8

The FY 1983 budget request of $1,481.8 represents a 23.1% increase over FY 1982. This compares with a gain of 2.9% for FY 1984 over FY 1983.

The following graph indicates that O&M,MC resources reflect an upward trend in real terms through FY 1983.

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, MARINE CORPS (O&M,MC)
REAL PROGRAM GROWTH

(GRAPH G)

Operation and Maintenance, Navy Reserve

The Operation and Maintenance, Navy Reserve FY 1983 request of $653 million, addressed in the table below, includes an increase of $81.9 million compared with the FY 1982 requirements of $571.1 million. As noted previously, the FY 1982 amount does not reflect the pay raise of $3.2 million. Price growth accounts for approximately $17.1 million and the real program growth is approximately $64.8 million of the total $81.9 million increase. The FY 1983 real program growth is reflected primarily in the following items:

. increase in the number of ship overhauls from 7 to 13 and a more expensive ship type mix

. increased funding to provide contract maintenance in support of FF 1052 class ships entering the Navy Reserve Force

. establishment of Shorebased Intermediate Maintenance Activities (Naval Reserve Maintenance Facilities) at Newport, Philadelphia, Long Beach, and San Francisco

. a contract berthing initiative to support Selected Reserve personnel during drill weekends

These items are partially offset by decreases in ship operations stemming from a reduced inventory and increased maintenance months.

DEPARTMENT OF THE NAVY
OPERATION AND MAINTENANCE,
NAVY RESERVE (O&M,NR)
(IN MILLIONS OF DOLLARS)

	FY 1982	FY 1982 - FY 1983	FY 1983	FY 1984
AIR RESERVE FORCE	217.1	- 15.0	202.1	216.0
SURFACE SUPPORT FORCE	4.9	+ .3	5.2	4.8
SHIP OPERATIONS	53.9	- 8.3	45.6	44.1
SHIP MAINTENANCE	67.8	+ 72.6	140.4	158.1
AIRCRAFT MAINTENANCE	88.8	+ 6.2	95.0	96.2
CONTRACTOR TECHNICAL ENGINEERING SERVICES	8.6	+ 1.4	10.0	7.7
BASE OPERATIONS	134.8	+ 11.7	146.5	156.6
OTHER	11.0	- 2.8	8.2	8.2
PAY SUPPLEMENTAL/FUEL	-15.8	+ 15.8	-	-
TOTAL: OPERATION AND MAINTENANCE, NAVY RESERVE	571.1	+ 81.9	653.0	691.7

The FY 1983 O&M,NR request of $653 million is 14.3% over FY 1982.

Operation and Maintenance, Marine Corps Reserve

The FY 1983 request for Operations and Maintenance, Marine Corps Reserve, shown in the next table, is $48.4 million, an increase of $8.1 million over FY 1982's $40.3 million. These funds will provide operating funds for training of the 4th Marine Division/4th Marine Air Wing, including maintenance and replacement of equipment and operation of training centers, the purchase of consumables, airlift support of training exercises, and administrative support of the Marine Corps Reserve. The increase in average strength of the selected Marine Corps Reserve is also supported by this request.

OPERATION AND MAINTENANCE,
MARINE CORPS RESERVE (O&M,MCR)
(IN MILLIONS OF DOLLARS)

	FY 1982	FY 82 - FY 83	FY 1983	FY 1984
TOTAL OPERATION AND MAINTENANCE, MARINE CORPS RESERVE	40.3	+8.1	48.4	48.8

The FY 1982 amount of $48.3 million for O&M,MCR is $8.1 million more than that requested in FY 1982, which represents a 20.1% gain in FY 1983.

Stock Funds

The FY 1983 budget request for Department of the Navy Stock Funds, exhibited next, totals $366.2 million, an increase of $343.5 million over the $22.7 million of FY 1982. The Navy Stock Fund (NSF) accounts for $354.4 million in FY 1983, up $345 million from the FY 1982 revised request of $9.4 million. The increase in FY 1983 with respect to the NSF consists of $115 million for Prepositioned War Reserve and $230 million for peacetime cash. The latter is required to procure initial levels of inventory in support of new ships, planes and equipment in an expansion and modernization of operating forces.

STOCK FUNDS
(IN MILLIONS OF DOLLARS)

	FY 1981	FY 1982-FY 1983	FY 1983	FY 1984
NAVY STOCK FUND				
PREPOSITIONED WAR RESERVE	9.4	+115.0	124.4	30.3
PEACETIME CASH	-	+230.0	230.0	-
TOTAL: NAVY STOCK FUND	9.4	+345.0	354.4	30.3
MARINE CORPS STOCK FUND				
PREPOSITIONED WAR RESERVE	13.3	-1.5	11.8	4.6
TOTAL: MARINE CORPS STOCK FUND	13.3	-1.5	11.8	4.6
TOTAL: STOCK FUNDS	22.7	+343.5	366.2	34.9

The total budget request for the stock funds increases more than fifteenfold in FY 1983 over FY 1982 to $366.2 million in reflection of DON's rapid buildup, but in FY 1984, the authorized amount drops back to $34.9 million. This spike is further reinforcement of the one-time nature of FY 1983's growth.

This completes my discussion of military personnel appropriations, operating accounts, and stock funds. Now let's turn our attention to the procurement accounts.

The next chart provides a display of the relative funding levels of the procurement appropriations.

DEPARTMENT OF THE NAVY
PROCUREMENT
FY 1983

(CHART H)

The Department of the Navy FY 1983 procurement budget totals $40.4 billion, approximately 46% of the total DON budget, and reflects the force structure rebuilding of the Navy started in FY 1982. This budget incorporates major initiatives to bring procurement rates up to levels that reduce unit prices, and to support multi-year contracting efforts in order to lower total costs. At the same time, it also takes into consideration the change in methodology necessary to budget to most likely cost. As pointed out earlier, these initiatives alone add over $2 billion to FY 1983 TOA. Moreover, the inclusion of two CVNs in a multi-ship program add almost $7 billion. These factors should be considered when reviewing each of the procurement appropriations, discussed in detail in the following pages.

Aircraft Procurement, Navy

The FY 1983 APN budget request totals $11,582.3 million, approximately 13% of the total DON budget, up from $9,140 million in FY 1982, for an increase of $2,442.3 million. A FY 1983 procurement of 288 aircraft is required to support current and projected naval aviation inventory objectives. This quantity represents an intermediate step towards significantly increased aircraft procurement levels required over the next five years to meet identified force requirements. The FY 1983 request contains an aircraft mix based not only upon force requirements, but upon an increased commitment to economies and efficiencies through more efficient production levels and initiation of a number of multi-year procurement programs. Further, the FY 1983 budget reflects an increased commitment to enhance fleet effectiveness through an extensive modification program targeted at extending the service life of fleet aircraft and updating them with modern and effective weapons systems. Readiness has received increased emphasis with a significantly expanded spare parts and support equipment program. The next chart depicts the major programs that make up the aircraft procurement plan. FY 1983 is compared with FY 1982 and FY 1984.

13% of the total DON budget, up from $9,140 million in FY 1982, for an increase of $2,442.3 million. A FY 1983 procurement of 288 aircraft is required to support current and projected naval aviation inventory objectives. This quantity represents an intermediate step towards significantly increased aircraft procurement levels required over the next five years to meet identified force requirements. The FY 1983 request contains an aircraft mix based not only upon force requirements, but upon an increased commitment to economies and efficiencies through more efficient production levels and initiation of a number of multi-year procurement programs. Further, the FY 1983 budget reflects an increased commitment to enhance fleet effectiveness through an extensive modification program targeted at extending the service life of fleet aircraft and updating them with modern and effective weapons systems. Readiness has received increased emphasis with a significantly expanded spare parts and support equipment program. The next chart depicts the major programs that make up the aircraft procurement plan. FY 1983 is compared with FY 1982 and FY 1984:

DEPARTMENT OF THE NAVY
AIRCRAFT PROCUREMENT, NAVY (APN)
(IN MILLIONS OF DOLLARS)

	FY 1982		FY 1983		FY 1984	
	Qty	$	Qty	$	Qty	$
A-6E (INTRUDER)	12	277.4	8	261.0	8	292.6
EA-6B (PROWLER)	6	246.8	6	316.6	6	356.9
F-14A (TOMCAT)	30	1071.2	24	1117.7	30	1334.6
F/A-18A (HORNET)	63	2082.8	84	2727.6	96	2720.9
AV-8B (HARRIER)	12	613.1	18	751.0	30	882.1
SH-2F (SEASPRITE)	18	184.3	18	189.4	18	199.1
CH-53E (SUPER STALLION)	14	243.3	11	289.1	11	344.2
SH-60B (SEAHAWK)	18	696.6	48	995.4	64	1061.7
AH-1T (SEA COBRA)	-	-	-	17.2	22	178.4
P-3C (ORION)	12	430.9	6	329.4	5	294.1
E-2C (HAWKEYE)	6	247.7	6	337.5	6	302.3
UC-12B	-	.2	-	-	-	-
C-2	-	37.0	8	267.8	8	222.2
F-5E	-	-	-	-	4	28.2
T-34C	60	53.1	30	34.4	28	31.8
TH-57	30	20.6	21	23.2	21	23.0
C-9B (SKYTRAIN II)	-	-	-	16.2	2	54.0
EC-130Q (HERCULES)	2	74.6	-	36.8	-	-
KC 130R	4	64.0	-	-	-	-
ECX	-	-	-	-	-	159.0
MODIFICATION OF A/C	-	926.7	-	1311.1	-	1502.8
A/C SPARES & PARTS	-	1541.2	-	2080.9	-	2487.1
A/C SUPPORT EQUIP & FACILITIES	-	328.5	-	480.0	-	424.7
TOTAL: AIRCRAFT PROCUREMENT, NAVY	287	9,140.0	288	11,582.3	359	12,899.7

Highlighting the FY 1983 request are 84 F-18 HORNET multi-mission tactical aircraft and 24 F-14A TOMCAT high performance, air superiority aircraft. Increased TOA has been requested for the EA-6B, E-2C, and the F/A-18 to maintain economic production rates. Part of the funding for the aircraft procurement reflects a change in budgeting to most likely cost. The AV-8B HARRIER and the SH-60B SEAHAWK, budgeted for 18 aircraft and 48 aircraft respectively, begin their second year of production as their production level quantities rise towards more efficient rates. The C-2A multi-year procurement continues in FY 1983 and three new multi-year procurements -- A-6E, EA-6B and CH-53E -- are introduced with advance procurement in FY 1983. Increased emphasis in both aircraft modifications and in aircraft spares and repair parts is reflected by significant increases over FY 1982 levels.

A shift in mix from trainers to more expensive aircraft occurs in FY 1983, as depicted below:

	FY 1982	FY 1983	FY 1984
Combat	191	229	296
Other	96	59	63

This shift results in an increase of 38 combat aircraft in FY 1983.

As the next graph illustrates, our budget includes significant real growth in APN between fiscal years 1980 and 1983. This growth is necessary to modernize our aircraft inventory, which has suffered in recent years because procurement levels were below what is required to offset attrition and normal retirements.

DEPARTMENT OF THE NAVY
REAL PROGRAM GROWTH
AIRCRAFT PROCUREMENT, NAVY (APN)

(GRAPH I)

Weapons Procurement, Navy

The FY 1983 WPN budget request totals $3,901.6 million, displayed below, compared with $3,215.1 million in FY 1982. This amount represents about 4% of the total DON budget. Included in the FY 1983 budget request is $775.4 million for ballistic missiles, $2,344.9 million for other missile programs, $604.9 million for torpedoes and related equipment, $165 million for other weapons procurement and $11.4 million for replenishment spares.

DEPARTMENT OF THE NAVY
WEAPONS PROCUREMENT, NAVY (WPN)
(IN MILLIONS OF DOLLARS)

	FY 1982		FY 1983		FY 1984	
	Qty	$	Qty	$	Qty	$
MISSILES						
TRIDENT I	72	906.3	72	742.8	72	786.8
TOMAHAWK	88	225.2	120	292.2	312	599.0
AIR-TO-AIR MISSILES	1357	348.0	1278	430.6	2030	595.1
AIR-TO-SURFACE MISSILES	118	107.8	208	176.8	250	155.3
SURFACE-TO-AIR MISSILES	1095	448.9	1175	678.2	1450	810.2
HARPOON	240	233.1	231	236.1	340	339.0
TORPEDOES						
TORPEDO MK-48	144	116.3	120	124.3	144	132.6
TORPEDO MK-46	253	57.8	440	141.2	1200	255.3
MK-60 CAPTOR	400	116.7	500	151.4	600	183.3
MOBILE TARGET MK-30	6	21.1	5	19.4	7	19.2
MK-38 MINI MOBILE TARGE	-	.7	1200	2.3	1200	2.3
OTHER						
FLTSATCOM	-	65.1	2	231.3	1	123.0
MK 75 (COAST GUARD)	1	4.5	3	10.7	5	17.4
MK-15 CIWS (PHALANX)	49	134.7	39	118.7	42	141.6
OTHER		428.9		545.6		772.2
TOTAL: WEAPONS PROCUREMENT, NAVY		3,215.1		3,901.6		4,932.3

The significant features of the FY 1983 WPN budget request are:

- continued production of TRIDENT I at a steady rate
- increased production of TOMAHAWK
- continued procurement of HARPOON
- increased procurements of SPARROW, PHOENIX, HARM and STANDARD missiles
- continued procurement of SIDEWINDER
- initial procurement of LASER MAVERICK
- procurement of FLTSATCOM (5 major shore stations, 2 satellites)
- continued procurement of MK-48 and MK-46 MOD 5 Torpedoes, and CAPTOR
- continued procurement of Close In Weapons System (CIWS)
- procurement of three MK-75/76MM gun mounts for the Coast Guard Hamilton Class Cutters undergoing mid-life conversions

As in the case of APN, some of the $700 million increase in WPN is attributable to procurement initiatives. The Standard (SM-1) Missile and the MK-46 Torpedo, for example, are proposed for multi-year contracting with a projected savings of $69.4 million and $38.1 million respectively. Approximately $200 million of the increases in SPARROW, PHOENIX, HARM, HARPOON, and STANDARD is the result of the effort to budget to most likely cost.

A commitment to increase sustainability is reflected in the growth of this appropriation, as shown in the ensuing graph. This is one of the few accounts in which significant growth is projected for FY 1984.

DEPARTMENT OF THE NAVY
WEAPONS PROCUREMENT, NAVY (WPN)
REAL PROGRAM GROWTH

(GRAPH J)

Shipbuilding and Conversion

The FY 1983 Shipbuilding and Conversion budget request totals $18,648.3 million, which accounts for approximately 21% of the DON total budget. This represents an increase of $9,746 million, almost 110% over FY 1982, in reflection of the Reagan Administration's desire to redress the balance of U.S. Naval power. The budget request for FY 1983 will provide 18 new construction ships.

The new construction ships included in this request are two TRIDENTS, two nuclear aircraft carriers, two SSN-688 Class Submarines, three AEGIS class cruisers, two FFG-7 class frigates, one LSD-41 class ship, four Mine Counter Measures ships, one fleet oiler (TAO), and one salvage ship (ARS). The amount included for new construction ships is $14,877.4 million. Funds totaling $1,482.5 million are included for the battleship reactivations, the FORRESTAL service life extension, conversions of four fast logistics ships (TAKRX) and the hospital ship (TAHX) program.

Also included are funds for landing and service craft, advance procurement funding for future ships, and funding for completion of prior year programs, including outfitting and post delivery costs. This request also reflects the policy change to fund design efforts of $97.2 million in SCN vice RDT&E,N. In addition, $25 million has been included for manufacturing technology in order to encourage the investment of private capital to develop improved methods, equipment, tooling and facilities used in shipbuilding. As noted above, SCN makes up over one fifth of the total DON budget in FY 1983, and represents a total request for 25 ships and submarines. This proposed growth is made in the spirit of the 97th Congressional Resolution, which calls for a 600-ship Navy, fully capable "to conduct the numerous and growing missions of the modern American Navy." The table below shows the program detail pertaining to SCN:

DEPARTMENT OF THE NAVY
SHIPBUILDING AND CONVERSION (SCN)
(IN MILLIONS OF DOLLARS)

	FY 1982		FY 1983		FY 1984	
	QTY	$	QTY	$	QTY	$
NEW CONSTRUCTION						
CARRIER (CVN-72/73)	-	475.0	2	6,795.3	-	-
TRIDENT SUBMARINE (SSBN)	-	330.7	2	2,485.0	1	1,703.9
ATTACK SUBMARINE (SSN-688)	2	1,343.0	2	1,443.4	3	2,013.8
AEGIS CRUISER (CG-47)	3	2,997.4	3	3,134.4	3	3,340.6
DESTROYER (DDG-51)		-		-	-	107.9
FRIGATE (FFG-7)	3	917.4	2	666.4	2	774.8
OCEAN SURVEILLANCE SHIP (AGOS)	-	-	-	24.3	1	183.7
MINE COUNTERMEASURES SHIP (MCM)	1	117.9	4	371.6	4	342.3
COASTAL MINEHUNTER (MSH-1)	-	-	-	-	1	73.1
DOCK LANDING SHIP (LSD-41)	1	297.8	1	417.0	1	477.2
AMPHIBIOUS WARFARE SHIP (LHD-1)	-	45.0	-	55.0	1	1,328.1
OCEAN SURVEILLANCE SHIP (TAGOS)	4	155.8	-	-	-	-
FLEET OILER (TAO)	1	257.1	-	320.0	3	530.4
SALVAGE SHIP (ARS)	2	134.2	1	84.0	1	68.5
CONVERSION/ ACQUISITION						
BATTLESHIP ACTIVATION	1	325.0	1	417.4	1	480.0
FBM SUPPLY SHIP (TAK) (C))	-	-	-	-	-	2.9
CV-SLEP	-	81.0	1	699.5	-	166.0
FAST LOGISTICS SHIP (TAKRX)(C)	4	410.0	4	322.6	-	-
COMBAT STORES SHIP (TAFS)	2	37.0	-	-	-	-
SURVEY SHIP (TAGS)	-	-	-	-	-	32.9
HOSPITAL SHIP (TAHX)(C)	-	-	1	300.0	1	260.0
OTHER COSTS	-	978.0	-	1,112.4	-	569.6
TOTAL: SHIPBUILDING AND CONVERSION, NAVY	24	8,902.3	25	18,648.3	23	12,455.7

Advance procurement funding in the amount of $729.9 million is included for continuation of the TRIDENT, SSN-688, CG-47, LSD-41, and ARS programs. In addition, $79.3 million in advance procurement funds are included for the amphibious assault ship (LHD-1, previously designated the LHDX) and AGOS SWATH ship programs. Additional $109.8 million advance procurement funds are included to initiate a multi-year procurement program for fleet oilers. Advance funding amounting to $257 million is also included for additional battleship reactivations and carrier service life extensions.

The balance of the FY 1983 SCN request of $990.2 million is for landing and service craft, outfitting and post delivery costs, and cost growth and escalation costs on prior year programs.

As I have mentioned several times throughout this presentation, a fully funded multi-ship procurement of the CVNs 72 and 73 is included in this budget request, scheduled for delivery in fiscal years 1990 and 1992. There are three major advantages to this approach.

- a 22-month earlier delivery of each ship through increased productivity
- a $750 million savings through economies from procurement efficiencies
- a stronger industrial base through improvements in vendor continuity and a reduction of production gaps

Two TRIDENT submarines are included in this request now that past construction problems, which caused earlier delays, have been resolved.

I have touched several times on the fact that FY 1983 represents a peak year for the DON budget in general; below, one can see graphically how this applies to SCN. This increase in SCN is clearly required if we are to regain our maritime strength.

DEPARTMENT OF THE NAVY
SHIPBUILDING AND CONVERSION (SCN)
REAL PROGRAM GROWTH

(GRAPH K)

Other Procurement, Navy

The FY 1983 Other Procurement, Navy request, the summary of which is contained in the next table, amounts to $3,970.2 million, or about 5% of the DON total. This represents an increase of $293.6 million, or approximately 8%, over the $3,676.6 million of FY 1982.

DEPARTMENT OF THE NAVY
OTHER PROCUREMENT, NAVY (OPN)
(IN MILLIONS OF DOLLARS)

	FY 1982	FY 1983	FY 1984
SHIP SUPPORT EQUIPMENT	692.1	568.9	801.1
COMMUNICATIONS AND ELECTRONICS EQUIPMENT	1174.1	1488.0	1761.6
AVIATION SUPPORT EQUIPMENT	579.2	608.2	881.3
ORDNANCE SUPPORT EQUIPMENT	830.1	785.2	985.6
CIVIL ENGINEERING SUPPORT EQUIPMENT	114.4	172.8	287.3
SUPPLY SUPPORT EQUIPMENT	75.9	91.2	118.4
PERSONNEL AND COMMAND SUPPORT EQUIPMENT	210.8	255.9	423.9
TOTAL: OTHER PROCUREMENT, NAVY	3676.6	3970.2	5259.2

Included in the FY 1983 request are $1,488 million for communications and electronics equipment, $785.2 million for ordnance support equipment, and $568.9 million for ships support equipment. Inventory objectives vary from program to program. The appropriation is composed of 400 P-1 line items, each of which has from one to thirty separate equipments, and each of which has its own inventory objective. Major initiatives in the FY 1983 OPN budget request are the procurement of BIGEYE chemical weapons and Joint Tactical Communications (TRI-TAC) systems.

Procurement, Marine Corps

The FY 1983 Procurement, Marine Corps budget request of $2.3 billion represents approximately 3% of the DON total. These funds, of course, do not include Navy (blue dollar) support of the Marine Corps, such as Marine Corps aircraft (in the APN request) or Air Launched Missiles (in the WPN request). The FY 1983 request increases by $569.2 million (32.9%) over FY 1982, primarily reflecting DON's continuing concern over readiness and sustainability.

This request provides for ground ammunition, weapons and combat vehicles, guided missiles, communications and electronics equipment, support vehicles (tactical and non-tactical), and engineer and other support equipment, and includes force structure changes which will increase fire power and battlefield mobility for the combat ground units. The table below, which summarizes the appropriation data, makes it evident that the production rates for the Landing Vehicle Tracked (LVT-7A1), the Light Armored Vehicle (LAV), and the STINGER Missile System increased sharply in FY 1983, as does the request for ammunition funds.

DEPARTMENT OF THE NAVY
PROCUREMENT, MARINE CORPS (PMC)
(IN MILLIONS OF DOLLARS)

	FY 1982		FY 1983		FY 1984	
	QTY	$	QTY	$	QTY	$
WEAPONS AND TRACKED COMBAT VEHICLES		424.1		486.0		431.9
LVT 7A1	30	57.3	168	151.5	171	163.5
LVT7 SLEP	378	175.7	363	157.2	219	106.5
LAV	60	36.2	134	89.7	141	84.3
155MM HOWITZER	159	58.3		-		-
40MM MACHINE GUN	792	20.6	570	16.5		-
OTHER		76.0		71.1		77.6
GUIDED MISSILES		213.8		263.9		250.0
IMPROVED HAWK, MISSILE SYSTEM	388	80.1	213	75.4	138	50.4
STINGER MISSILE SYSTEM	488	38.9	1560	115.6	1440	115.7
TOW MISSILE SYSTEM	2666	43.0	1000	28.6	2371	53.6
OTHER		51.8		44.3		30.3
AMMUNITION		314.5		630.2		345.1
COMMUNICATIONS/ELECTRONICS		325.1		476.8		549.1
SUPPORT VEHICLES		174.7		190.9		211.2
OTHER SUPPORT EQUIPMENT		279.2		252.9		200.4
TOTAL: PROCUREMENT, MARINE CORPS		1,731.5		2,300.7		1,987.6

As one can see from the next graph, Marine Corps procurement has more than doubled in real terms since FY 1981, reflecting our commitment to rapid deployment capability and Marine Corps modernization.

DEPARTMENT OF THE NAVY
PROCUREMENT, MARINE CORPS
REAL PROGRAM GROWTH

(GRAPH L)

Research, Development, Test and Evaluation

The FY 1983 budget estimate for Research, Development, Test and Evaluation, Navy is $6,232.3 million, or about 7% of the total request. This is $425.2 million, or 7.3% higher than the FY 1982 revised budget. Full funding of a number of high priority programs has been maintained within the FY 1983 budget at the expense of 28 lower priority programs, which have been cancelled, as well as by restructuring programs to lower cost options and by deferring some new starts.

The TRIDENT II program represents $366.7 million (54.8%) of the strategic programs in the FY 1983 request. Additional items of interest are contained in the following table:

DEPARTMENT OF THE NAVY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION (RDT&E,N)
(IN MILLIONS OF DOLLARS)

	FY 1982	FY 1983	FY 1984
TECHNOLOGY BASE	769.8	853.5	936.2
ADVANCED TECHNOLOGY DEVELOPMENT	152.2	165.1	242.8
STRATEGIC PROGRAMS	526.5	668.9	1,829.6
TACTICAL PROGRAMS	3,546.3	3,678.1	3,671.3
INTELLIGENCE AND COMMUNICATIONS	215.3	247.8	400.1
DEFENSE WIDE MISSION SUPPORT	597.0	618.9	666.5
TOTAL RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY	5,807.1	6,232.3	7,746.5

The budget provides funding for the technology base of $853.5 million in research ($313.5M) and exploratory development ($540M). A request of $165.1 million is included for advanced technology development. The tactical programs are funded at $3,678.1 million and include programs such as TOMAHAWK missile ($78.9M), F/A-18 ($109.2M), DDGX ($138.6M) and MK-48 ADCAP ($186.8M). Of the $668.9 million for strategic programs, $366.7 million is for TRIDENT II missile development. Intelligence and communications is funded at $247.8 million while the request for DOD-wide mission support is $618.9 million, which includes $274 million for test and evaluation support.

R&D funding is virtually level through FY 1983, as depicted in the real program growth graph. The FY 1984 increase is attributable to the impact of TRIDENT II development.

Five-Year Plans

In view of the long lead time associated with aircraft procurement and shipbuilding, I believe it is helpful to take a second look at the APN and SCN appropriations, this time with emphasis on the outyears instead of FY 1983. Accordingly, the next two tables pertain respectively to the five-year plans for aircraft procurement, and shipbuilding and conversion.

The Five-Year Plan for aviation is designed to achieve tactical Air Force requirements for a 14 Carrier Battle Group force level during the FYDP years as an interim step towards the objective of a 15 Battle Group force in the years beyond the FYDP. The Five-Year Plan maintains the Marine Corps at 3 airwings through the FYDP. Other mission areas addressed by the plan include maritime patrol aircraft, TACAMO and trainer aircraft.

An increased aviation capability is provided by the introduction of advanced technology aircraft being phased into the fleet. Introduction of the F/A-18 HORNET will continue throughout the FYDP years. The AV-8B HARRIER and the SH-60B SEAHAWK will both undergo initial introduction into the fleet. An enhanced capability TACAMO aircraft will be introduced under the ECX program. A variant configuration of the H-60 aircraft will be introduced for the innerzone ASW mission. Introduction of a new advanced trainer aircraft will provide a new generation trainer for jet pilots.

The aircraft quantities depicted in the first table below are indicative of the Department of the Navy's effort to establish stable economic procurement profiles. Through efficient production rates and a growing emphasis on multi-year procurement, aircraft unit costs are being held to minimum level.

DEPARTMENT OF THE NAVY
AIRCRAFT PROCUREMENT, NAVY (APN)
FIVE YEAR PLAN

	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987	FY 1983- FY 1987
A-6E (INTRUDER)	8	8	12	12	12	52
EA-6B (PROWLER)	6	6	6	6	6	30
F-14A (TOMCAT)	24	30	30	30	30	144
F/A-18A (HORNET)	84	96	108	132	132	552
AV-8B (HARRIER)	18	30	48	60	60	216
SH-2F (SEASPRITE)	18	18	18	18	-	72
CH-53E	-	-	-	-	-	-
(SUPER STALLION)	11	11	11	14	14	61
SH-60B (SEAHAWK)	48	64	74	-	-	186
SH-60 VARIANT	-	-	-	64	64	128
AH-1T (SEA COBRA)		22	22			44
P-3C (ORION)	6	5	5	5	5	26
E-2C (HAWKEYE)	6	6	6	6	6	30
UC-12B			12	12	37	61
C-2	8	8	8	8	7	39
F-5E (FREEDOM FIGHTER)	-	4	4	4	4	16
T-44A	-	-	-	15	-	15
HXM	-	-	-		6	6
T-34C	30	28	28	28	30	144
TH-57	21	21	-	-	-	42
C-9B (SKYTRAIN II)	-	2	2	2	2	8
ECX	-	-	3	3	3	9
VTX	-	-	-	12	24	36
TOTAL NUMBER OF AIRCRAFT	288	359	397	431	442	1,917

Highlighting the Five-Year Plan are 552 F/A-18 aircraft, 144 F-14A aircraft, 52 A-6E aircraft, 216 AV-8B aircraft, and 186 SH-60B aircraft. The total of 1,917 aircraft represents the optimal mix of aircraft to best perform the Department of the Navy's assigned aviation missions.

The SCN Five-Year Plan, displayed next, calls for the new construction of 133 ships and submarines from FY 1983 through FY 1987 and the conversion or acquisition of 16 ships, for a total of 149 ships and submarines. Specific data relative to type of vessel and year of its construction or conversion/ acquisition are displayed below:

DEPARTMENT OF THE NAVY
SHIPBUILDING AND CONVERSION, NAVY (SCN)
FIVE YEAR PLAN

	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987	FY 1983-FY 1987
NEW CONSTRUCTION						
AIRCRAFT CARRIER (CVN-72/73)	2	-	-	-	-	2
TRIDENT SUBMARINE (SSBN)	2	1	1	1	1	6
ATTACK SUBMARINE (SSN-688)	2	3	4	4	4	17
AEGIS CRUISER (CG-47)	3	3	3	4	4	17
DESTROYER (DDG-51)	-	-	1	-	3	4
DESTROYER (DD-963)	-	-	-	2	1	3
FRIGATE (FFG-7)	2	2	2	3	3	12
OCEAN SURVEILLANCE SHIP (AGOS)	-	1	-	2	3	6
MINE COUNTERMEASURES SHIP (MCM)	4	4	5	-	-	13
COASTAL MINEHUNTER (MSH-1)	-	1	-	5	5	11
DOCK LANDING SHIP (LSD-41)	1	1	2	2	2	8
AMPHIBIOUS WARFARE SHIP (LHD-1)	-	1	-	-	1	2
FAST COMBAT SUPPORT SHIP (AOE)	-	-	1	1	2	4
FLEET OILER (TAO)	1	3	4	4	6	18
SALVAGE SHIP (ARS)	1	1	-	-	-	2
CABLE LAYING SHIP (T-ARC)	-	-	-	1	-	1
NUCLEAR CRUISER (CGN-42)	-	-	-	-	1	1
AMMUNITION SHIP (AE)	-	-	1	2	1	4
DESTROYER TENDER (AD)	-	-	-	1	1	2
CONVERSION/ ACQUISITION						
BATTLESHIP ACTIVATION (BB)	1	1	1	-	-	3
FBM SUPPLY SHIP (TAK) (C))	-	-	1	-	-	1
CV-SLEP	1	-	1	-	1	3
FAST LOGISTICS SHIP (TAKRX) (C)	4	-	-	-	-	4
SURVEY SHIP (TAGS) (C)	-	-	2	-	-	2
HOSPITAL SHIP (TAHX) (C)	1	1	-	-	-	2
RANGE SHIP (TAGM) (C)	-	-	-	1	-	1
TOTAL NUMBER OF SHIPS	25	23	29	33	39	149

A total of six TRIDENT submarines are budgeted for the five-year period. A total of 17 each SSN-688s and CG-47s are budgeted through 1987, with a fairly level stream of construction planned for both during the five-year period. Likewise, a total of 12 FFG-7s are budgeted through 1987 with either two or three scheduled in each of the five years. In the case of Mine Countermeasure Ships (MCMs), however, all of the new construction of 13 ships are budgeted for the first three years of the five-year period. Eighteen fleet oilers (TAOs) are budgeted for FY 1983 through FY 1987.

Readiness

The following table contains readiness indicators on OPTEMPO, ship and aircraft operations, ship maintenance, aircraft rework, and the aircraft mission capable rate. As the data indicate, we are demonstrating some overall improvement, but much has yet to be accomplished.

DEPARTMENT OF THE NAVY
READINESS INDICATORS

	FY 1982	FY 1983	GOAL
o SHIP OPTEMPO (DAYS/QUARTER)	41.6	40.2	43
o PMR (%) (SIMULATORS)	85(3)	86(3)	88
o SHIP OVERHAUL BACKL	16	11	11
o BMAR ($MILLIONS)	781	783	0
o COMPONENT REWORK (%)	98.0	100	100
o MISSION CAPABLE RATE (%)	60	62	70
o AIRFRAMES ON EXTENSION (%)	9.0	6.0	6
o BARE FIREWALLS (NO.)	80	36	36.40
o MARINE CORPS UNIT DEPLOYMENT (NO.)	32	33	37

*OPERATIONALLY CONSTRAINED

The reduction in OPTEMPO is a result primarily of decreasing OPTEMPO of non-deployed fleets to provide more in-port time following long deployment; degradation of short-term readiness is not anticipated. Primary Mission Readiness (PMR) increases slightly, to 86% in FY 1983 (including 3% simulators). Ship overhauls are showing some improvement, but, as I mentioned earlier, progress is impeded by operational requirements. The Backlog of Maintenance and Repair (BMAR) shows little change from last year, still short of the congressional containment level of $563 million. The mission capable rate is slowly improving for the Navy toward the CNO goal of 70%.

In the category of aircraft rework, which includes airplanes, engines, and components, the FY 1983 budget reflects full funding of validated aircraft depot maintenance requirements.

Economies, Efficiencies and Savings

No presentation of the DON budget for FY 1983 is complete without mentioning the effort we in the Department of the Navy have made to effect economies, efficiencies and savings. Below is a summary of estimated savings directly attributable to our initiatives in this area.

DEPARTMENT OF THE NAVY
ECONOMIES, EFFICIENCIES AND SAVINGS
(IN MILLIONS OF DOLLARS)

	FY 1981-1987
o LOWER COST ALTERNATIVES	-1,146
o PRODUCTIVITY ENHANCEMENT	-195
o MULTI-YEAR PROCUREMENT	-347
o ECONOMIC PRODUCTION RATES	-428
o ELIMINATION OF MARGINAL PROGRAMS	-4,355
o REDUCTIONS IN ADMINSTRATIVE OVERHEAD	-1,392
o OTHER	-1,331
TOTAL ECONOMIES, EFFICIENCIES & SAVINGS	-9,194

The Department of the Navy estimates that over $9 billion in savings can be achieved in an effort to reduce the Federal budget. We are estimating savings of approximately $7 billion in the acquisition area and $2 billion in the operations area.

Our efforts in the acquisition area include savings from elimination or reduction of 43 marginal programs with savings estimated at $4.4 billion. Shifting to lower cost alternatives will save an additional $1.1 billion. The use of multi-year procurement methods, production at economical rates, and investment in productivity enhancing capital equipment will save another billion dollars. These projected savings are net savings that will accrue to programs after initial investment costs are recovered.

In the operations area, the DON has made major reductions in administrative areas such as travel, consulting services, and audiovisual activiites. More efficient use of personnel, facilities and equipment will also contribute to operations savings. For example, these include changes in advertising and recruiting methods as well as better utilization of computers.

Mr. Chairman, that concludes my presentation of the Department of the Navy budget. I began my remarks by asserting that FY 1983 represents a critical opportunity for the Department of the Navy to make up for a serious underinvestment in past years. I think you will agree this budget takes an important step toward rebuilding our Naval Forces.

REAR ADMIRAL RICHARD A. MILLER, U. S. NAVY

A native of West Orange, New Jersey, Rear Admiral Miller enlisted in the Navy in 1945. He received a fleet appointment to the United States Naval Academy, and graduated with the class of 1950. His first tour of duty after commissioning was as Main Propulsion Assistant in USS GOODRICH (DDR-831).

Following flight training and designation as a Naval Aviator in November 1952, he served with Patrol Squadron Forty Five, operating seaplanes from Naval Station, Coco Solo in the Panama Canal Zone. In 1955, he qualified as a helicopter pilot and served with Helicopter Anti-Submarine Squadron One. His next assignment was as Aircraft Maintenance Officer and Search and Rescue pilot at the Naval Air Station, Chincoteague, Virginia.

Rear Admiral Miller then served two years as an Exchange Officer with the Royal Navy, serving in HMS ARK ROYAL (R-09) and as Executive Officer of 820 Squadron. On return to the United States in 1961, he was Assistant Force ASW Officer on the staff of COMCRUDESLANT.

He served as Executive Officer and Commanding Officer of Helicopter Anti-Submarine Squadron Three aboard the USS RANDOLPH (CVS-15). Following his squadron command tour, he was assigned to the Anti-Submarine Warfare Systems Project Office in Washington, D.C. In 1969 and 1970 he was Commander, Carrier Anti-Submarine Air Group Fifty-Three in USS KEARSARGE (CVS-33) assigned to the Seventh Fleet.

He commanded the USS SPIEGEL GROVE (LSD-32) and in May 1974 he was assigned as Commander, Amphibious Squadron Four and from May 1976 to June 1978 served in the office of the Chief of Naval Operations, Systems Analysis Division, Washington, D.C., as Deputy Director. He was elevated to Flag Rank in June 1978 and became Commander Anti-Submarine Warfare Wing, U.S. Pacific Fleet on 8 August 1978.

In December 1980 he was appointed by the President as the Director of

Budget and Reports, Office of the Navy Comptroller, and Director, Fiscal Management Division, Office of the Chief of Naval Operations.

Among Rear Admiral Miller's awards are the Legion of Merit, the Navy Commendation Medal, and the Vietnamese Navy Distinguished Service Order. He is a graduate of the United States Naval Postgraduate School, Monterey, California, and holds a Master of Science Degree in Operations Research. He is also a graduate of the Army War College, Carlisle Barracks, Pennsylvania and in 1971 he was assigned to Harvard University where he was a Fellow at the Center for International Affairs.

Rear Admiral Miller is married to the former Claire Meylich of West Orange, New Jersey. They have three sons.

U.S. MARINE CORPS

STATEMENT OF GEN. ROBERT H. BARROW, USMC, COMMANDANT OF THE MARINE CORPS

ACCOMPANIED BY:

E. T. COMSTOCK, FISCAL DIRECTOR, MARINE CORPS

DEVELOPMENT OF NAVAL STRENGTH

Senator STEVENS. General?

General BARROW. Mr. Chairman, I welcome this opportunity to make a few brief comments and I do not wish to talk about things and dollars, I want to talk about war fighting, if I may.

If I may draw on 40 years as a Marine and three wars, and look ahead at the uncertainties out there and the treaty obligations that the Secretary alluded to, and the need to gain access to resources, and simply to friends that are not parts of alliances; the growth in the Soviet Navy capability for force projection; its continuous use of surrogates, puppets, and proxies, I think that we must have the kind of capability that one finds in naval forces.

I want to say clearly, sir, that I regard naval strength improvement, maritime superiority, as an imperative—not a "nice to have"—and it must be thought of, I think, always as an imperative. Not just to draw on the cliches that we are an "island nation" or that we are a "maritime nation" but the realities are that we will go beyond our own shores to engage the enemy wherever, whenever, for whatever.

I believe that the three principal factors that gained the most importance for the naval forces rest with mobility, flexibility, and availability. By mobility, meaning they have global reach, they can go anywhere. Flexibility, being able to do more than one thing—not just antisubmairne or antiair, but as the Navy often says, they are three-dimensional—they fight above the sea, on the sea, and below the sea. The Marines are the fourth dimension. With the Navy we fight from the sea.

There is virtually nothing that we cannot deal with up to a certain level, and this is the result of the combination of the two working together.

U.S. GROUND FORCE PRESENCE

There are only two places in the world where there is a ground force presence, and those are the central region of Europe and the Korean peninsula. All the rest of it must necessarily cause someone to start from zero.

Now, there may be some specialized situations where one could go in under an umbrella of host nation security that would permit you to go permissively. I do not think we can ever count on that. We must be able to open our own doors. We must be able to do it without a dependency on base rights an overflight rights—that is the raison d'etre of my service. Our speciality is not just force projection, but forcible entry--working with the Navy.

I think that if we go anywhere—and that means just that—anywhere in the world, which we may be called upon to do, we must be able to enter forcibly because there is the presumption you would not be going there if it was not unfriendly on the other end. That, in itself, is a very difficult kind of operation.

The amphibious operation is the most difficult of all, launched and sustained from the sea. The necessity to build your combat power from zero and to lead to that which is sufficient to encompass the mission.

Third, the integration and coordination with the diverse and and complex forces that are involved. I see it, as I said earlier, simply as an imperative. We know how to do all of that.

QUALITY OF MARINE CORPS

I want this committee to believe me when I tell you that you have as fine a Marine Corps as you have ever had, in those soldierly virtues and values that are so important—discipline, spirit, enthusiasm, mindset as relates to readiness. We train hard. We are all over the world working with the Navy. We just backed off of a cold-weather operation 160 miles north of the Arctic Circle in Norway. We have just come out of Australia, and are going to Korea with another formation. Just the other day we entered the Indian Ocean. These exercises are microcosms, if you will, small examples of what could be applied if the need arose.

This mobile, flexible, and available instrument of diplomacy and deterrence—which is ready to fight—is the thing we are talking about.

The Marines, your Marines, are as good as I have ever seen them. That is not by accident. We have worked hard in the Marine Corps to give quality people—in their physical fitness, appearance, all of these things that are part of our spirit, our very being. We have adhered to, uncompromised, the principles of physical fitness, performance, conduct, and appearance.

So, having said that, let me add that a lot of it is due to the congressional interest in us more often than it has been from the executive branch. For years we have been sort of supplicants on that table. We come over here and the Congress, seeing that we are somewhat deserving of resources and the wherewithal to fight, responds. You bail us out year after year.

This is a time—and I have never seen it in all my years—when at long last we get the combination of both executive branch support and congressional support to make us truly more effective than we have ever been in peacetime.

This budget started last year, really with the Reagan amended budget which gave dramatic improvements to the Marine Corps. It continues this year. It excites us. Marines are looking forward with great anticipation to unprecedented modernization, significant improvements in sustainability and overall readiness. Having said all of that, if there is any member of the committee or any of the staffers who are prepared to raise the question, "Well, are you becoming an extravagance?" Indeed not! It is the very antithesis of that. I would remind this committee that you get all of this I am speaking of for less than 3 percent of the total obligational authority of the Department of Defense. If you add Navy direct support such as aircraft procurement, it is less than 5 percent. I submit that is a bargain.

I appeal to this committee to continue to give to the U.S. Marine Corps and to the Navy with which we are in such close concert, the wherewithal to give this country the kind of capability which I believe is more essential than any other war-fighting requirement that we may have.

I thank you, sir.

[The prepared statement of Gen. H. Barrow follows:]

PREPARED STATEMENT OF GEN. ROBERT H. BARROW

COMMANDANT

U.S. MARINE CORPS

Mr. Chairman, distinguished members of the committee:

It is a privilege to have the opportunity to present to you the fiscal year 1983 budget for the United States Marine Corps. I have provided in my appended posture statement a detailed overview of the Marine Corps status, our future direction and how we fit within the overall defense needs of this nation. My remarks today will be confined to discussing the specifics of our fiscal year 1983 budget request, stressing those areas I believe to be most important.

Let me initially emphasize that one of the most important challenges facing this nation is restoration of our maritime superiority. Our entire budget request is predicated on maintaining and improving our ability to contribute to the projection of sea power wherever and whenever needed, and in particular, our forcible entry capability.

For the six specific Marine Corps appropriations, we have requested $7.3 billion dollars in fiscal year 1983. The major elements of the budget are depicted in the following chart:

FISCAL YEAR 1983 BUDGET ESTIMATE
($ in millions)

APPROPRIATION	FY 1982	FY 1983
Military Personnel, Marine Corps	$2,817.7	$3,276.1
Reserve Personnel, Marine Corps	141.5	165.9
Operation & Maintenance, Marine Corps	1,204.0	1,481.8
Operation & Maintenance, Marine Corps Reserve	40.3	48.4
Procurement Marine Corps	1,731.5	2,300.7
Marine Corps Stock Fund	13.3	11.8
TOTAL	$5,948.3	$7,284.7

The request is approximately 8 percent of the Department of the Navy budget, and less than 3 percent of the Department of Defense budget. As you are aware, the Marine Corps has always maintained a reputation for frugality while playing a significant role in support of our country's national security objectives. It is my personal commitment to see that we continue to be deserving of that reputation.

Before reviewing the fiscal year 1983 budget, I would like to address the fiscal year 1982 program Supplemental request.

SUPPLEMENTAL

Our fiscal year 1982 program Supplemental request covers a variety of critical items, primarily those related to non-discretionary entitlements requiring little explanation. However, I do want to discuss a few of the programs which are discretionary. In Military Personnel we require an additional $9 million for our selective reenlistment bonus program. When Congress changed this program from a lump sum to an installment method, yearly funds were reduced. Unfortunately, we were well into the fiscal year before the Congressional decision was made and lump sums had already been paid resulting in a shortfall of $9 million. I urge support for this request so that we can fully implement the bonus program approved by the Congress last year.

In Operation and Maintenance we are requesting an additional $15 million for real property maintenance. I particularly want to thank the Congress for the $12.7 million addition to our fiscal year 1982 request for maintenance of real property. However, this additional $15 million requested will permit reduction of the backlog, approaching our containment level by 1982.

In Procurement, we have the opportunity to commence a program to replace a number of obsolete, heavy vehicles with a single one capable of performing a variety of heavy tasks. We plan to begin procurement this fiscal year for $20 million and then continue at a much higher level in fiscal year 1983 and beyond. Approval of the Supplemental request will accelerate this replacement, improve readiness, and expand our capabilities.

MANPOWER

Turning to the fiscal year 1983 request, our manpower program calls for an end-strength of 194,600, a 2,500 increase over the fiscal year 1982 level. This additional manpower will strengthen air defense and combat service support capabilities, support structural enhancements in both the aviation and ground elements, and achieve higher manning levels throughout the active force structure.

Quality personnel in sufficient numbers are the key to success in maintaining the readiness and combat capabilities of Marine operating forces. The Marine Corps has been very successful in meeting both qualitative and quantitative manpower requirements over the past two years. Higher levels of military compensation, and other resources applied, have been instrumental in improving recruiting and retention. As a result, we met our recruiting goal for fiscal year 1981, exceeded our high school graduate target of 75 percent, and reenlisted more Marines than in any previous year. Our continuing emphasis on quality has resulted in lower attrition, fewer disciplinary problems, and progressive improvements in our career force since more highly qualified individuals are eligible to reenlist and are doing so.

With the continued application of bonus monies, approved by Congress in fiscal years 1980, 1981, and 1982, and for which I again offer my appreciation, we are making progress in solving our critical skills problem. It is, however, premature to assess the impact of the installment payment method on reenlistments; we will monitor this closely and report the results if they are significant.

Civilian personnel represent a major element of our total manpower requirement. Our fiscal year 1983 end-strength request of 20,637, an increase of 491 over fiscal year 1982, satisfies minimal requirements. Although austere, it provides for growth necessary to support operational programs, and to release Marines from duties that are best performed by civilians.

OPERATIONS

Funds contained in the Operation and Maintenance, Marine Corps appropriation are intended primarily to maintain the combat readiness of the Fleet Marine Forces. Funds are also provided for detachments afloat, security forces, and shore facilities which support the Fleet Marine Force. The fiscal year 1983 Operation and Maintenance request of $1.482 billion includes $205 million real program growth over the fiscal year 1982 estimate.

This expansion includes $160 million that will improve the readiness of the Fleet Marine Force. Of this amount $101 million is for material and supply support such as cold weather clothing, medical/dental items, camouflage screening nets and funding for significant reduction in our depot maintenance backlog; $40 million is requested to support our NATO and Maritime Prepositioning Ships (MPS) programs; and, $4 million is for phasing in the sixth and final year of our successful unit deployment program.

Thirty-five million of the dollar growth is for base operations, training and other supply and administrative support programs, including the requested civilian personnel increase. Fleet Marine Force support will be improved along with quality of life programs enjoyed by the Marine and his family, which have a major influence on his reenlistment decision. Such items as personnel support equipment, dining facility equipment, and collateral equipment are also included.

Finally, the recruiting and advertising increase of $7 million will correct deficiencies in the recruiting of certain key personnel categories and curb a disturbing drop in market awareness of the Marine Corps. Continued success in recruiting depends upon these additional funds.

PROCUREMENT

Procurement funding of $2.3 billion, $570 million over the fiscal year 1982 estimate, achieves an important balance among readiness, sustainability, and modernization. Although inflation accounts for $124 million of the increase, $446 million is real program growth.

New programs in the fiscal year 1983 budget will enhance the flexibility of our combat force. These include:

SMAW (Shoulder Launched Multi-Purpose Assault Weapon) - increases infantry firepower - defeats field fortifications (bunkers) and urban targets (concrete/masonry) - destroys light armor.

HMMWV (High Mobility Multipurpose Wheeled Vehicle) - replaces overage vehicles (all current 1/4, 1/2, 3/4, 5/4, ton vehicles and 1/4 ton trailers) - functions as troops and weapon transport, weapons platform, fire support, medical evacuation, and in C3I application - complements Field Logistics System.

PLRS (Position Location Reporting System) - improves tactical operations by providing accurate position location information on friendly units - improves commander's ability to control manuever elements and provide accurate and timely fire and air support.

AN/TPS-59 (Primary long range, air defense radar system) - improves air defense capabilities - replaces AN/TPS-32 - finest radar in terms of ECM capability, maintainability and overall performance produced by free world.

The balance of the procurement request largely represents a continuance of the fiscal year 1982 budget; highlighted portions are:

Ammunition - provides for annual peacetime training needs and the acquisition of war reserve stocks for use in the event of mobilization - enhances Marine Corps readiness and combat sustainability.

TOW (tube-launched, optically-tracked, wire guided missile) - permits Marine infantry units to defeat advance Soviet armor - improves infantry survivability on the battlefield - purchases new missiles.

MK-19 (40MM machine gun) - engages light armored vehicles such as the BMP and its anticipated successor - reaches acquisition objective in fiscal year 1983.

LAV (Light Armored Vehicle) - enhances the firepower and mobility of the of the infantry through off-the-shelf procurement - helicopter transportable - continues second year of planned six year procurement.

Reverse Osmosis (Water Purification Unit) - produces potable water for Marine forces from salt brackish, or impure fresh sources of water - third of six year purchase - replaces four types in the inventory which have reached the end of their life expectancy.

Medium Girder Bridge - improves and simplifies Marine fording capabilities with the introduction of a light weight, easily transportable bridge.

MCESS (Marine Corps Expeditionary Shelter System) - provides shelter support for such functions as maintenance, warehousing, hangar facilities, medical, and service support - supports DoD standardization efforts.

LVT7 (Amphibious Vehicle) - extends LVT7 service life into the 1990s - satisfies known requirements for the MPS.

MULE (Modular Universal Laser Equipment) - provides the forward combat elements with the ability to employ air and artillery laser guided munitions - continues procurement initiated in fiscal year 1982.

I-HAWK (Improved HAWK) - provides Marine Corps' primary low to medium altitude air defense capability - continues program to equip three HAWK battalions with four TRIAD batteries each.

STINGER (anti-air missile) - replaces REDEYE missile - is fifth of a planned nine year buy - provides greater accuracy and improved engagement/attack capability.

Finally, procurement funds support the Marine Corps Reserve in such important areas as ammunition, reduction of deficiencies in the war reserve stocks, and purchase of major end items used for training.

RESERVES

The Reserve Personnel, Marine Corps appropriation contains an increase of $24.4 million over the fiscal year 1982 estimate, primarily supporting an average -strength increase of 700, expanded Individual Ready Reserve mobilization training, a higher level of Selected Marine Corps Reserve schooling and special training, increased Reserve full time support, and increased training of officer candidates in the Platoon Leaders Class. The Operation and Maintenance, Marine Corps Reserve appropriation increases $8.1 million over 1982 and supports an end-strength increase, improved mobilization readiness, increased training tempo and improved management capabilities.

NAVY SUPPORT

Navy appropriations contain significant support for the Marine Corps. Aviation support is the most important since the essence of the Marine Corps is the air-ground team. Our insistence that air and ground elements deploy as task organized units is the heart of the Marine Corps' combat effectiveness. Therefore, modernization the Marine aviation component continues to be a major goal.

Development and acquisition of a replacement for our aging medium helicopter fleet of CH-46s and CH-53A/Ds is the Marine Corps' number one aviation modernization program. Inventory shortages, old age, and survivability/maintainability problems make an immediate solution to the situation extremely important. To do this, the Marine Corps has embarked upon a dual approach. We are participating in the establishment of a joint service program designed to produce an advanced vertical lift aircraft in the early 1990s while also pursuing procurement of off-the-shelf helicopters as an interim measure to cover our inventory shortages until the IOC of the advanced aircraft. Funding requested in fiscal year 1983 will allow us to proceed with both approaches to our medium assault lift solution.

Modernization of our fixed wing aircraft continues. Eighteen AV-8Bs are requested in fiscal year 1983. And, the Marine Corps will begin replacing its F-4 Phantom aircraft by standing up the first of three F/A-18 squadrons commencing in July of 1982, with nine more Marine F/A-18 squadrons scheduled in future years.

The Marine Corps maintains keen interest in other Navy programs in areas such as medical personnel support and construction. Clearly, we are concerned about the serious deficiency in amphibious lift capabilities. The LSD-41 and and LHD-1 programs are encouraging and any retrenchment would entertain higher military risks than I consider prudent. A modern amphibious force cannot ignore the concept of the landing craft air cushion (LCAC) vehicle. Marine Corps interest in this program is intense. The reactivation of battleships, fleet hospital programs, naval gunfire enhancements, and mine countermeasure improvements are also vital to the maintenance of our maritime strength.

The Marine Corps allocation of the RDT&E, Navy appropriation amounts to $388 million in fiscal year 1983. Research and Development programs in which the Marine Corps maintains especially high interest are: the Mobile Protected Gun System (MPGS) and the Tactical Air Operation Central-1985 (TAOC-85).

SUMMARY

A few years ago a familiar Marine Corps' recruiting slogan was "nobody likes to fight; but, somebody has to know how." Marines know how; and, given the resources, we can be relied upon to remain prepared to fight anyone, anytime, anyplace. The Corps is your certain force in an uncertain world. Despite the relatively small portion of resources required to support the Marine Corps, its contribution to the maintenance of peace is significant. So, as you review the Marine Corps budget in detail over the coming months, be assured that a more cost-effective investment in national security is not available.

JAPANESE NAVAL ASSISTANCE

Senator STEVENS. Thank you, General.

Mr. Secretary, are the Japanese giving us the assistance that they are supposed to be giving us in terms of the protection of the sealanes out of Japan?

Secretary LEHMAN. The force that the Japanese Maritime Self Defense Force provides is excellent in quality but inadequate in size. There is definitely more in the long term, in our judgment, that Japan can and should provide to maritime security in the Western Pacific. It is an issue that is raised continually between the governments. We believe we have seen some progress this year. We have seen the Japanese Government increase their real defense spending, along with other government expenditures, this past year, and we are encouraged by that. I believe that the size of the contribution that they can make is much larger than what is now being made, but I think they are headed in the right direction.

Senator STEVENS. We were supposed to take this committee over there last fall but we were delayed. It was my understanding they made a commitment to us to keep sealanes open and to guarantee the sealanes for a thousand miles out of Japan.

They now have reached their near mythical limit of 1 percent of their GNP and have indicated they are not going to go any farther. But they cannot keep their commitment to us unless they do go farther. We are at what, 6½ percent of our GNP, they are at 0.9 percent of their GNP.

Are we to become the navy of the world, Admiral, is that our goal, to provide protection for the sealanes of all nations without regard to any indication of support from those nations themselves?

Admiral HAYWARD. No, not at all, Mr. Chairman. I quite agree with you, the Japanese have established a commitment out to 1,000 miles. Their Navy is qualitatively good but it cannot deal with that commitment. They know that and they have to do more. We ought to help them try to accomplish more. Certainly, we want them to do more. We want all our allies to do more.

Senator STEVENS. They have not kept any part of their commitment so far, have they? To increase their naval forces to maintain that 1,000-mile protection?

Admiral HAYWARD. They have been increasing their naval capability steadily for at least 10 or 15 years.

Senator STEVENS. What does that mean in terms of numbers and ability to keep that treaty commitment, or at least commitment, I do not know if it is a treaty or not.

But they made a firm commitment to us that they would patrol 1,000 miles from Japan.

Admiral HAYWARD. They made that as an objective, and it is one we should insure they achieve by our own diplomatic interface with them because we need their support. We need that commitment on their part being met in order that we will not have to be the one and only navy in the Pacific.

Senator STEVENS. What about the Persian Gulf, do they have any commitment to assist us in the Persian Gulf?

Admiral HAYWARD. By the Japanese or others, sir?

Senator STEVENS. By others, obviously the Japanese would not be involved—although they have as much reliance on Saudi production as we do or more. They get 99 percent of their energy by importation, we are at about 30 percent.

But I do not see any other country of the world moving as we plan to move to provide sealane protection throughout the globe; do you?

ALLIED NAVAL CONTRIBUTIONS

Admiral HAYWARD. No, I do not. There are no written commitments to Indian Ocean support. There is unwritten support on the part of the French, in particular, who maintain quite a number of ships in the Indian Ocean on a continuing basis. The British and the Australians provide some support, but it is minimal.

Senator STEVENS. Mr. Secretary, isn't this 15 battle group goal really aimed toward providing that protection for other nations that will not protect themselves?

Secretary LEHMAN. No, Mr. Chairman. Our view is that American security interests are what the U.S. Navy exists to deal with. It would be naive to think that we could meet the minimum, vital security interests of the United States without the web of regional security agreements that we have around the world, especially in light of the size threat that the Soviet Union and its allies can mount.

The NATO Treaty, the Japan Self Defense Treaty, the ANZUS Treaty, the OAS Treaty, all of these represent good and sound regional security bases that provide a major U.S. security interest.

The only way we can hope to deal with such a massive interdiction threat from the Soviet Union is through the substantial contribution of our allies. It is a fact of history that the great maritime powers all are on our side.

Senator STEVENS. Are they great maritime powers any longer?

Secretary LEHMAN. Yes, I believe that, while in size many have shrunk to diminutive status in terms of numbers, in quality the Allied navies are still among the very best in the world, in the specialized tasks they do. The Royal Navy, the French Navy, the Dutch, the German, the Italian, and the Spanish, are all very good in their specific tasks. They provide together, for instance, about 100 diesel-electric submarines which are very good for close coastal and choke-point kinds of defense tasks. It is only through the existing Allied capability, which we want to have them build on, that we are able to say that with a 600-ship Navy we can deal with the 1,700-ship Navy of the Soviets.

Senator STEVENS. Well, it has been my impression, and I may be wrong, that most of them are protecting their own shores and going no farther. Is Britain east of Suez now?

Secretary LEHMAN. Yes, they are in fact east of Suez—not with as many ships as we would like to have.

Senator STEVENS. On a commitment basis that they are going to provide clear sealanes for all nations in the world?

Secretary LEHMAN. We are in discussions with Her Majesty's government about long-term commitments for naval forces to work with our forces on the security of that area.

Senator **Stevens**. But as of now we do not have any, do we, in the Indian Ocean, any kind of protection for the Persian Gulf oil production? The only commitment that I know of in the world is ours.

Secretary **Lehman**. Well, that is not entirely true, Senator. The French, for most of that period, had more ships in the Indian Ocean than we had. They have maintained a very ready force out there including, occasionally, aircraft carriers.

Senator **Stevens**. Then why are we there, if they can do it? they are more heavily reliant upon that area than we are.

Secretary **Lehman**. That is right. I would not argue that we should be the policemen of that area. I believe that the countries that depend on the oil more than we do should be providing more in the way of force to do it.

We are there not out to do charity for everyone in the world. I believe our force, whether or not we stay there, should be judged solely on the basis of U.S. national interests. But our security interests are tied to our allies and their security as well. But I would say, we have to deal from purely a pragmatic and selfish approach when asking the taxpayers to put up money for defense.

Senator **Stevens**. We are going to follow the 10-minute rule and I have come to the end of mine except for, Admiral, you made some statements about reducing pay and in effect not touching this budget or the commitments that have been made in the past.

FEDERAL BUDGET DEFICIT

I would like to ask you this plain and simple, if you are staring at a $160 billion deficit. If we do not do something about it, it means next year your budget is going to be cut in half. Would you rather lose 5 percent now or half next year?

Admiral **Hayward**. Well, if it is related to military pay and benefits, and keeping our people motivated because they know the Congress is supporting them, I would say you can cut anything other than manpower if it is an order of priority you are looking for. I am not asking you to do that.

Senator **Stevens**. The Budget Committee tells us to cut force structure, not to cut any procurement, not to cut any modernization; cut force structure.

Admiral **Hayward**. Of course, I am not supporting a cut in force structure either.

Senator **Stevens**. Where would you support it? I mean, we face the problem of what to do with a projected budget that the Congressional Budget Office gives to us, which is now somewhere in the vicinity of $160 billion, before policy decisions.

Some of those policy decisions obviously have to affect the military when we are looking at 30 percent of the budget. As a matter of fact, we are looking at something like a $22 billion out of $30 billion increase in this total budget is for the Department of Defense.

So, we know that the attack is going to come on the Department of Defense. Where would you put the lowest priority? I am talking about the Navy, I am not asking you to talk about the Army, Air Force, or the Marines. I will talk to the General later. As a matter of fact, I think they have been skimped on. I would like to see them get a little bit more money.

But, as a practical matter, where would you put it in the Navy?

Admiral Hayward. Whatever size Navy you want, let us have it ready to go, manned with properly trained people. So, the priority is there. You are going to have to cut force structure.

Senator Stevens. I suggest to you there are a lot more people staying in the Navy this year because there are not jobs elsewhere. Unemployment is the highest we have seen it in well over a decade. All your retention money, all your bonuses, and everything else, did not have as much impact on those young sailors as the fact there are no jobs if they leave.

Admiral Hayward. I do not agree with that.

Senator Stevens. The Navy is being myopic if they think that it is the Navy's changes that are keeping those people in blue suits right now.

Admiral Hayward. I think it is a combination of all those things, Senator.

Senator Stevens. Senator Rudman?

Senator Rudman. I yield to Senator Stennis.

Senator Stennis. That is all right.

Senator Stevens. No, sir, I forgot. I apologize.

Senator Stennis. That is all right. I am sorry, Mr. Chairman, that I did not get here a little earlier. I wanted to hear the Secretary's testimony and that of the General's and the Admiral's, of course.

I used to be concerned about the military budgets not being enough, and frankly, I am concerned now that the huge total this year may really backfire and in its wake create prejudice—and I use that expression in its better sense not its worse—create an adverse reaction here toward future budgets. We will fight this one out and come out with the best we can.

But I want to hear the Secretary explain how he is going to save this $1 billion on the two carriers. I also want to say a little bit on this Japanese situation.

I can say that quite briefly. I have been here since the days when we would not let the Japanese rearm, arm at all, they were just prohibited, as you know. We would not entertain the though of it. Now we are getting behind them—rightly, I think—to carry more of the load. Conditions just changed.

I live here on the hill and come along every morning and those little cars just go by me so fast I cannot count them. They look like most of them are made in Japan. [Laughter.]

So, that is an illustration that things have changed. We have to do something about it and I do not think the Navy ought to be called on and blamed, either, about these agreements with Japan and about the Arabs. That is not your main job. Some other Agency of the Government has to carry that load, the Congress included.

But, Mr. Secretary, you are a very resourceful man. If anybody can save $1 billion getting two carriers at once, or any sizable part thereof, you can do it if anyone can.

TWO CVNS IN FISCAL YEAR 1983

What is your explanation of these two carriers? You know, I am a carrier man. I was the author of the extra carrier we put in beyond the budget several years ago. Mr. Carter thought he could not carry it so he vetoed the bill.

How are you going to manage that?

Secretary **LEHMAN**. Cost savings has the highest priority of any issue in the Department of the Navy today. I would like to submit for the record this compilation of cost savings that we have carried out in the last 12 months, it comes to a total of almost $10 billion—cost avoidance, cost savings—over the program that we put forward.

Senator **STENNIS**. Over what period of time, now?

Secretary **LEHMAN**. This will be over the period of the 5-year plan. I would also like to submit for the record a summary of an analysis, an economic layout, of the cost savings in the two aircraft carrier buys. I would like to submit that for the record.

[The information follows:]

TWO CVN COST SAVINGS

The procurement strategy of fully funding CVN-72 and CVN-73 in fiscal year 1983 delivers two vitally needed ships nearly four years sooner and saves about $750M when compared to the usual sequential procurement strategy of funding the carriers individually in separate years. The Navy's acquisition strategy fully funds the ships' end cost in fiscal year 1983; thus the procurement strategy not only reflects the full-funding policy expressed by the Congress as well as by the Office of Management and Budget, but also will go a long way in strengthening vendor and contractor industrial bases. CVN-72 and CVN-73 will incorporate all the significant survivability enhancement features being incorporated into CVN-71 as well as those already inherent in *Nimitz*-class carriers. These ships will provide the Fleet with two of its primary battlegroup building blocks.

The objective of the recommended CVN 72/73 Multiship Strategy is to obtain two new CVN assets in the most rapid, economic and efficient manner. The advantages of this strategy are:

SIGNIFICANTLY IMPROVED DELIVERY

Twenty two months earlier delivery for each ship over that attainable under a traditional one ship at a time acquisition strategy. Earlier delivery is made possible by better planning, scheduling and facility utilization.

$750 million savings resulting from:

Reduced escalation—approximately $300 million.

Economic order quantity savings from multiple ship set buys—approximately $250 million.

Reduction of startup, set up and other non-recurring costs—approximately $100 million.

Improved planning, manpower, utilization and productivity—approximately $100 million.

Encourages a stronger industrial base by improving vendor continuity and reducing production gaps at prime subcontractor level.

Assists in shortening CVN 71 construction by up to 14 months at a savings of approximately $74M.

Senator **STENNIS**. Those are the two that are in the budget now?

Secretary **LEHMAN**. The two that are in the budget. I believe the Armed Services Committee asked the General Accounting Office to examine our estimates of the cost savings. Our analysis supports a direct cost savings of $750 million for the taxpayer by buying two instead of one at a time. It is due out this week. I am confident that the GAO, after examining exhaustively the data in the Naval

Sea Systems Command and with the contractor at Newport News, will confirm that it is at least $750 million.

The reason we were persuaded to ask for two this year was because of the tremendous efficiency that was apparent to us and was borne out in negotiations with the contractor. We just started building the *Teddy Roosevelt,* CVN-71, and by combining these two, we can buy, in many cases, three at a time and get the cost savings of buying threes instead of ones.

We expect to realize great savings in planning for forward deliveries in materials. By allowing more time we generate more competition, because if you are offering three ships' sets of equipment you will get many more bidders and hence, through the competition, the price will inevitably be better.

Additionally, we allow the contractor to make prudent planning for his trades, his employment levels and his apprentice programs. By also allowing the contractor to make investments now in environmental shelters we will save many delays caused by bad weather when you have such large structures out of doors.

All of these are going to result in not only a direct cost savings of $750 million, but in indirect savings of far more. In addition, it will deliver the three CVN's a total of 5 years ahead of the normal schedule.

ECONOMIC IMPACT OF SPENDING

I would also like to submit for the record a breakdown of where the economic impact of this spending will be. It is, for instance, not just in the actual construction shipyards. According to the defense economic impact modeling system, some 40,000 jobs are generated by each billion dollars of this SCN account, and is distributed 18 percent in the Far West; 27 percent in the North Central States; 32 percent in the South, and 23 in the Northeast. So, the economic benefits are distributed all over the country and is a major generator of jobs and employment.

[The information follows:]

PROJECTION OF ECONOMIC DISTRIBUTION FOR BUDGET APPROPRIATION

CARRIERS

	WEST	NORTH CENTRAL	SOUTH	NORTHEAST
% POP.	18	27	32	23
%$	8	19	51	22
$	0.5B	1.3B	3.5B	1.5B

SECONDARY MULTIPLIER EFFECT

Secretary **Lehman**. According to this same modeling system, the secondary multiplier effect of this spending adds another $4 billion in supporting industries and another $4 billion in supporting products; $4.5 billion in supporting services; $2.5 billion in oil and energy, and associated equipments at $2.8 billion. This is generated by the secondary multiplier effect, which is over and above.

So, you see, there are very major advantages to committing up front. Senator we have, as I am sure motiviates your question, broken with the past practice. As you have seen for at least the last 10 years, the Navy has had to sit here and be promised that in the "great by and by" we were going to get better, and that the outyears of the 5-year plan is where the ships were. The current year was a holding year always, as you know. This was the pattern.

We have broken the practice and have provided you, up front, a major investment in the future and a choice to face, because, if we are not going to be able to expand the Navy, we want to know now. We want you to face up to it now and make the choice.

If the country cannot afford two aircraft carriers, then they will never ever be able to afford them after this year. If we cannot buy them this way, we will buy them at the old way, guaranteeing at least one-half of a billion dollars more per ship, and associated delivery delays.

COST SAVINGS ON AIRCARFT CARRIERS

Senator **Stennis**. Mr. Chairman, I expect my time is up.

Thank you very much, you sound better and better as you go along. By way of summary now—by way of summary—you are estimating that the old carrier, the *Roosevelt* that is being built now, $100 million you are going to save there.

Secretary **Lehman**. Yes, sir, in fact, we have already negotiated that contract change, and it is scheduled for 14 months early delivery.

Senator **Stennis**. And you say under your responsibility as an official that you are going to save the way you express it here on page 35 of your statment. "In addition to this $100 million, the two carriers offer a potential savings of almost $1 billion dollars."

Secretary **Lehman**. Yes, sir.

Senator **Stennis**. You stick to that now, is that right?

Secretary **Lehman**. I stand behind that, yes, sir.

Senator **Stennis**. What does that "almost" mean, just a little bargain? [Laughter.]

Secretary **Lehman**. We await the findings of the GAO this week. I would say it will be a minimum of $750 million, and my guess is closer to $1 billion.

Senator **Stennis**. Thank you. I hope I get a chance to ask you gentlemen something a little later.Thank you, Mr. Chairman.

Senator **Stevens**. Thank you, Senator.

Senator Rudman?

Senator **Rudman**. Thank you, Mr. Chairman.

I just want to say to General Barrow and to Admiral Hayward that I fully agree from my own observations with your comments about the current status of your forces. I had a rare opportunity this year to spend some time on the *Nimitz*, on the *Cincinnati* and to join the Marines on their joint amphibious operations in Turkey. I think we can be justifiably proud of the forces that we are deploying and the equipment they are using.

I think anyone who unjustly criticizes those forces or their equipment really has not been apprised of the situation as it exists.

That is not to say that we do not have some deep concerns about the cost of some of these programs which, I think, the Secretary has rightfully addressed himself to this morning. Rather than talk about any specific program in particular, I would just like to ask you several questions about your procurement program and some of the conflicts that you are faced with within that program.

INDUSTRIAL BASE VERSUS COMPETITION

You stated in your testimony that you are relying more and more on competition, and I believe you are. But what do you do about resolving this problem that you have, the conflict that you have between competitive pricing versus keeping the industrial base going?

I will give you a specific example which I have become aware of recently. You have some decisions to make on the FFG procurement versus who is going to build some of the new CG's. You have one yard in particular, in the Northeast, up in the State of Maine, that we all know and all agree has done some remarkable things in terms of delivery, in terms of price, in terms of quality.

And yet, I understand the Navy may not be able to give them as much as they might be able to handle, because you have the problem of keeping other yards busy, even though those yards may require a higher price and a longer lead time. How do you resolve those problems?

How are you going to resolve them, Mr. Secretary?

Secretary **Lehman**. Well, we try to find the most prudent balance between the two. As I am sure you are no doubt aware, we just awarded two more frigates to Bath Iron Works because they won the competition on price and performance. We did not award a frigate to each of the other two building yards. We did award one to Todd, Los Angeles. With the frigate program that we have in the future, two yards is all we need to keep competition in that program.

We need to get competition into our now relatively more important program, the Aegis cruiser program. As you know, we are running a source selection to select the best-qualified second source. We will then, starting with the 1982 third Aegis cruiser, build with a second source and compete against the first source to foster greater competition. Now, whichever yard wins that source selection will be the second source.

As the Chief of Naval Operations has testified, we believe that we should procure at least four Aegis cruisers per year. Certainly, we will never let it slip below three.

Senator **Rudman**. Does your procurement doctrine at this time include the absolute requirement for at least making available a second-source competition to primary systems?

Secretary LEHMAN. Yes; where the program is large enough to justify the additional cost we will second source, because there is an up-front cost to tool up a second source. Where the program is big enough, in terms of numbers of units, certainly, I am firmly committed to that.

Senator RUDMAN. Because we have seen in procurement in the other services in two areas where once the statement was made that there was going to be a second-source competition, it was incredible what happened to the primary source in some cases in terms of how much more responsive they became.

Secretary LEHMAN. Absolutely.

Senator RUDMAN. I believe that one of the reasons procurement has been out of control over the last 5 or 6 years, looking at the track records of all three services, is that we have had too much sole sourcing and not enough competition.

Now, obviously you have to sole source your carriers right now; we understand that. But there are literally thousands of subsystems and subcontracts within your aircraft procurement, your ship procurement and within your other systems procurement that in my view ought to be vigorously second sourced and put out for competition because the free enterprise system has a wonderful way of bringing unit cost down.

Secretary LEHMAN. I fully agree.

Senator RUDMAN. So long as people know they have it their own way, then there is no incentive to bring that cost down.

Secretary LEHMAN. I fully agree.

Senator RUDMAN. I certainly hope that you will follow that vigorously.

Secretary LEHMAN. I agree completely.

Senator RUDMAN. I want to ask General Barrow just one question. I kind of agree with the chairman in talking to some of your people about the fact that there are some things that maybe have been skimped on.

What is not included in this budget this year that, if you had your druthers, you would have included? What is your top priority for something that you think the U.S. Marines ought to have that they do not have?

MARINE CORPS PRIORITIES NOT INCLUDED IN BUDGET

General BARROW. Well, I have to qualify that by saying that the things I would name have had some appearance in the budget development process, but due to competing requirements and higher priorities they fell out. So, this is not a grab at the sky answer, but things that are close to the Marines due to the kind of fighting we do. I would say that more attention needs to be paid to naval gunfire. This is not a criticism of the U.S. Navy or the Secretary in his decisionmaking. As I said at the outset, competing requirements often drive these things out of the budget.

We really are terribly dependent in any kind of a forcible entry—amphibious operation—on naval gunfire. It is our artillery until we get our artillery ashore. It is all weather. There are systems out there that have great possibilities as relates to increased lethality, accuracy, and range.

You heard the Secretary say that the semi-active laser-guided projectile, also Seafire, was canceled due to excessive costs.

When that happens, the only thing we have left are the few 5-inchers, only a few, on various ships in the Navy which are scattered all over the world plus, of course, the battleship *New Jersey* when it comes out with its 16-inch guns, which tend to be more general area, as opposed to pinpoint precision.

We are concerned, as we always will be, about the adequacy of amphibious lift. But, let me hasten to qualify, that by saving that there is more to be encouraged about than to be concerned about.

For the first time in 10 years we have a program that shows some steady improvement in that area. The problem is that we are coming out of a hole and that which already exists is becoming obsolete. So, to deal with both of those programs; to come out of the hole and to face up to the obsolescence, is going to be a serious problem for the Navy—again, in competition with all of the many other things that must necessarily be bought. But it is encouraging, as I said when I brought the subject up.

Medical support in the objective area, Army, Navy, Air Force, and Marine Corps. I would say to this committee that we tend to treat that subject much as we do some of these others that are not quite so obvious until they happen—like NBC, civil defense, I can name any number of them. They are kind of off there and you wish you would not even mention them, just do not look at them.

People get killed, people get sick, people get hurt. If we went to war today in some remote, distant place, the biggest tragedy of all would be the inadequacy of sophisticated medical support in the combat zone. That may be in fact, if you wanted me to prioritize the things that are not in here, No. 1.

Senator RUDMAN. That was one of your priorities that you spoke about last year which we, I believe, put in over here on this side, but I believe was lost somewhere along the way. Am I correct?

General BARROW. That is correct. Your counterparts, as I recall, engaged in zeroing it out. I guess in conference it did not survive.

The Secretary can talk more about solutions to that. We are working on interim solutions, a rapid deployment medical force that is borrowed from the Army by the Navy and being replaced by the Navy with units procured by the Marine Corps. These units are being put in the prepositioned ships to deal in an interim but inadequate way with that very critical problem.

Senator RUDMAN. I asked that question, Mr. Chairman, because I think that particular statement by General Barrow is one that really bears some attention. That is a very serious statement that he made to the effect that in the event of a serious emergency we do not have adequate medical facilities to care for our troops in combat areas. I really think that is something this committee ought to take a good, close look at.

We did last year. Unfortunately, we did not have much luck with the other side. But, I think we ought to make it one of our priorities this year, even if it is outside of the budget as submitted to us.

Senator STEVENS. We will take this as your request for a hearing specifically on that subject and schedule one before we mark up the bill.

Senator RUDMAN. Thank you.

Secretary **Lehman**. If I could just add something.

Senator **Stevens**. It is Senator Kasten's time, but go ahead and respond if you wish.

Secretary **Lehman**. By your leave, Senator Kasten.

The success of the TAKX competition is what now gives us the strong confidence that the convert and charter option indeed produce the kind of competitive environment that would allow us to save a great deal of money and realize early delivery. The three MAF lift has resulted in our, now, submitting a reprograming request for $60 million in the 1982 budget for TAKX. We intend to reprogram some $25 million of it for prepositioned medical field hospital support. Because of the success of TAKX we are only going to need about $8 million of 1982 funding for that program, and similary in 1983 about the same amount of money. We are recommending to Congress that we be allowed to reprogram that money for these more urgent, short-term hospital and medical care needs. In addition, we added, in August, $300 million to the hospital ship program to get on with that program without delay. That is what we are requesting in this year's budget, rather than delaying it until next year. We recognize that the problem is severe, and we are getting on with it.

Senator **Stevens**. Senator Kasten?

SMALL VERSUS LARGE CARRIERS

Senator **Kasten**. Mr. Secretary, we are going to be hearing a lot about small versus large and nuclear versus non-nuclear carriers.

Would you outline the advantages that you see in the 90,000-ton over 40,000-ton carrier? How much do they differ in terms of procurement cost, manning requirements and operational cost?

Do you see any value in a mix of the 90,000 and the 40,000-ton carriers?

Secretary **Lehman**. I see no value in a mix below the level of 15 large-deck carriers. Beyond that I see a very real value in smaller carriers. In fact, last year we asked for a small size carrier to be reactivated.

Senator Hart's proposal for a 40,000-ton carrier, for two of them, would have merit if we were beyond the 15th big carrier. To do the job that these 15 big-deck carriers are required to do with the ships that Senator Hart has proposed, is a much more expensive way to do it and, in my judgment, a less battle-worthy way to do it.

The biggest Alice in Wonderland nonsense in this town, that never dies, is that somehow big ships are more vulnerable than little ships. It is, of course, just so much rubbish. Big ships are faster, much more survivable, much more battle worthy; can take much more damage; can carry many more offensive and defensive aircraft, and are, in every way, less vulnerable than small ships.

But the fact is, we have a 40,000-ton carrier in this year's budget as well. We do not need two more. We are starting a new class of aircraft carrier called the LHD-1, a new class that I believe Senator Stennis took the lead helping to get designed. It is a convertible LHA that is first and foremost an amphibious assault helicopter carrier which we need badly; but is designed from the ground up to convert to an all-up aircraft carrier for Harrier type V/STOL as well as the next generation of V/STOL aircraft, antisubmarine warfare helicopters, and amphibious helos. Two ships for the price of one. It is the 40,000-ton aircraft carrier that Senator Hart and others have argued for, but it cannot substitute for the CVN. The nuclear carrier is the only way to provide a survivable force at a cost-of-ownership rate for the next 50 years. After all, these are 45-year minimum ship investments we are making.

Admiral Rickover has brought along the development of very long-life cores. So, in effect, you do not have any fuel costs, certainly not for the first 15 years of the ship's life, because you are paying for it in the up-front budgeting that includes the fuel in the price. So, the CVN is insensitive to shortages or fluctuations in the oil market which of course smaller, conventional carriers are not.

I would like to ask Admiral Hayward if he would comment further on it.

Admiral HAYWARD. I am very impressed with the Secretary's explanation of it because, of course, it follows right down the logic train that the professional naval officer feels about the issue over large or small carriers.

There is a point in our total force structure where the ability to distribute more ships, more offensive ships, is a sensible thing to do. If it were true that you could build three small carriers for the price of one large carrier and build three small carrier battle groups for the price of one large carrier battle group, then you would have a case. But, it is not true. When you price out the construction cost of the carrier, the airplanes that go with it, the other force structure that makes up a battle group, one that goes to sea to destroy the enemy, the price of the carrier becomes less and less a factor in your overall cost equation.

What you end up with if you make two 40,000-ton carriers today, is, a more expensive force than one large carrier, and you have about two-thirds of the firepower. You have only half of the actual striking power in the fighter and attack aircraft on the two smaller carriers. So, there is a complex equation that must be taken into account in the way of war fighting when one examines small versus large and numbers versus quality.

The analysis that we have done time and time again, which this committee has seen over the years, shows that if you are dealing with numbers of battle groups that are less than 15 or 16, then the right investment strategy is to build the carrier that we know how to build best today, which is the *Nimitz* class carrier.

In the long term, if this country were to build the Navy that the Navy would want, there would be a group of small carriers, because we would go beyond 15 battle groups. But we do not expect support for that much investment. So, if we are building just a few more battle groups, then the right solution is to build the kind of carrier we have asked for, the *Nimitz*.

CARRIER BATTLE GROUP EFFECTIVENESS IN LOW-THREAT ENVIRONMENT

Senator KASTEN. Admiral, there have been allegations that the carrier battle groups are only useful in a low-threat environment. Could you address yourself to that charge?

Admiral HAYWARD. I have never heard that allegation. If there was ever one thing we would build a carrier battle group for it is to go in harm's way. If we want to go into a limited-war kind of scenario, then you would build an entirely different kind of Navy.

We are building this Navy to take on the Soviet Union, along with our allies and our sister services. We design our force structure to take on the Soviet Union and its allies. We demand that our naval force be able to go in harm's way. There can be no such thing as a sanctuary at sea. We cannot tolerate that as a policy. We must have the capability to go where we want, when we want.

Our Navy is intended to go into the Mediterranean, into the Indian Ocean, the Far East, into the Norwegian Sea, the North Atlantic, wherever we have to take it: it had better be good enough to go there and fight. It takes a sophisticated Navy to do that today.

Senator KASTEN. Thank you, Mr. Chairman.

BATTLESHIP BATTLE GROUPS

Senator STEVENS. I am a little confused when we talk about battle groups. The estimate that we received from you, Mr. Secretary, was that it is $3.7 billion to procure a battleship group as compared to $11.4 billion for a carrier battle group.

Now, if that is the case, why did you opt for the carrier battle groups?

Secretary LEHMAN. The battleships are a very capable, war-fighting platform that can survive with air superiority provided from somewhere else, usually an aircraft carrier. It can survive in harm's way and deliver a wide range of strike capability against Soviet interdiction forces. It stands on its merits for that task. But the battleship cannot provide the kind of defense in depth and strike capability that a 90-aircraft air wing on a *Nimitz* aircraft carrier can provide.

Each is valuable. The battleship surface action group, and that is one way to estimate what its investment cost is, is much less expensive but also much less capable. But it is well worth $3.7 billion, if that is what the figure is. The cost is often used in the press in a distorted way by inferring that somehow every ship that goes into a battle group is being bought to defend the carrier or the battleship; that is simply nonsense.

We buy an *Aegis* cruiser to provide air defense, whether it is over a convoy or a surface action group or a port area or a landing area.

We buy frigates to do antisubmarine warfare, whether it is with a convoy or in a harbor approach, or whatever. Each ship that we aggregate together in a battle group stands on its own for the warfare task it is designed to do. When you put it with a carrier, it provides an immensely formidable, 4-dimensional area, extending to about 1,000 miles across our command of the seas.

Senator STEVENS. I am reminded of a conversation I had with one of my sons, how he had justified for himself how he was going to save money and save money for me if he bought a new car, compared to his old car. I was not convinced he needed his old car. [Laughter.]

What we are dealing with right now, the Congress is wondering why we have so much money we are spending already for defense, and you are really asking us to do battle as one of the two committees of the Senate to have a substantial increase in new equipment all at once.

AIRCRAFT PROCUREMENT

Having said that, let me ask you this—and this young man put the idea in my mind, as a matter of fact—suppose we buy the idea of the two carriers. Why is it necessary to procure at the same time the new aircraft for those carriers? Could we not use the F-4's and the A-7's for a little while? I mean, if we really have to make some economies, would not the carrier be the key to the modernization rather than the aircraft?

Secretary LEHMAN. There is no easy way to put one above the other because we have deferred aircraft procurement for 8 straight years, until the 1982 budget that this committee appropriated last year. For 8 successive years before that, Congress only appropriated enough money, and indeed, the executive branch only asked for enough aircraft, to replace only one-half the peacetime attrition, that is the aircraft we lose in training accidents and those retiring due to old age.

So, we had 8 years of only buying half the number of airplanes we are losing, and we therefore have enormous deficits. We do not have any combat replacements for any of our major fleet aircraft today. So, if you start losing them in a war there is no pipeline except what is in, what we call, the maintenance pipeline.

Yes, of course, we are going to extend A-7E's, A-6E's, F-14's, and existing F-4's, indeed, until they simply cannot be maintained any longer. Many of these aircraft are 20-year-old designs, and some of the airframes themselves are as old as 20 years. We are not going to put any new aircraft out into the boneyard. But we simply have to get on with the deferred staying even.

The aircraft in this budget will build the 13th air wing for the U.S.S. *Carl Vinson*. Subsequent budgets will provide the force expansion for a 14th carrier wing, and ultimately, by the end of the decade, a 15th carrier air wing. But we are in such a deficit position today, that we do not even have wartime attrition replacements for the 12 existing air wings.

NAVY SPENDING LEVELS

Senator STEVENS. Let me put it this way, then—one of the Senators asked me the question I am going to ask you. In 1981 we had outlays of $156 billion for defense; in 1982, $182 billion for defense; in 1983 we are projecting $216 billion for defense.

He said to me, "OK, if I vote with you this year, how much are you going to ask for next year or the next year?" In other words, when does the cycle slow down a little bit? If I am listening right to the admiral, it is not going to slow down, it is going to increase.

How do we get that trend line into a little bit better control? It is not a line right now, it is a curve that is going up so fast I do not think we are going to keep up with it unless we get that deficit in line.

Secretary **Lehman**. Senator, let me agree with you that we cannot let the curve go asymptotic, just go off the charts. We believe that we have a very prudent, steady, acutally declining, outlay stream that is adequate to carry out this growth. The Navy alone this year, in outlays, only grows 9.6 percent, not the 20 percent that the budget authority indicates. Next year it goes down to 8.8 percent growth; then 8.1, then 7.4 in 1986, and down to 5.7 in 1987.

We project that we will peak out defensewide overall at 37 percent of Federal spending at the highest point and then decline. We will never even reach the steady state level of percent of GNP that was experienced during the Eisenhower and the Kennedy years. In those days, defense took over 50 percent of the Federal outlays. We will never even get above 37 percent.

So, it is not an unending blank check we are asking for. In fact, this is our peak year in terms of growth rate because we put it up front. We want the American people to face up to the choice now and not defer it and bow-wave it as it has been for 15 years.

Senator **Stevens**. I am talking outlays. Are you talking outlays?

Secretary **Lehman**. I was talking outlays, yes. Actually, we go down next year to a minus 4-percent growth in Navy budget authority.

Senator **Stevens**. Senator Stennis?

Senator **Stennis**. Nothing further now, thank you.

Senator **Stevens**. Senator Rudman?

Senator **Rudman**. I have no other questions for these witnesses this morning, Mr. Chairman.

Senator **Stevens**. Senator Kasten?

D–5 MISSILE

Senator **Kasten**. Mr. Secretary, yesterday the Armed Services Strategic and Theater Nuclear Forces subcommittee put the MX missile in a temporary holding pattern. What do you think of a common missile based on the D–5?

Secretary **Lehman**. As you know, we have proposed an acceleration of the D–5 missile to 1989. We are examining the possibility, if it provides genuine program savings, of perhaps accelerating this further to 1988.

This missile, as you know, has the same purpose of providing hard-target kill capability in a survivable mode. But the two environments of the land-based missile and the sea-based missile are very different. The D–5 is a missile that must be carried in a submarine for months and months at a time, where its power sources need husbanding and where we do not have the ease of parts replacement that exists in a land-based missile. There are very different design parameters. A missile that is optimized for sea is definitely not optimized for land. It could be used on land but they are different, very different environments.

PROJECT ELF

Senator **Kasten**. I hesitate to ask this question, but is everything proceeding smoothly with project ELF?

Secretary **Lehman**. Yes, everything is proceeding smoothly with Project ELF. We think it will add a very valuable additional dimension of survivabilty, reliability to the command and control of our submarine force.

Senator **Kasten**. Are you running into any particular problems in Michigan? It was my understanding that you still have some opposition there to the program.

Secretary **Lehman**. Well, compared to problems on our other programs I would say we do not have any serious problems there in Michigan, no.

Senator **Kasten**. Our Wisconsin State Senate recently rejected an anti-ELF amendment by a vote of 19–13.

Secretary **Lehman**. Good.

Senator **Kasten**. I think that was significant. We also have substantiated support in the counties that are affected. But, as you know, this has been a start and stop program under three different names. I hope that we can proceed and proceed smoothly. I look forward to working with you.

FOLLOW-ON BLUE-GREEN LASER SYSTEM

What is your best estimate for the follow-on blue-green laser system? What is the time-frame for that type of communications system?

Secretary **Lehman**. That is a technology that we are pursuing, but is is not on the horizon. It may come about in the next decade, but operationally not in this decade.

AV–8B

Senator **Kasten**. General Barrow, is the AV–8B, the Harrier, living up to your expectations, and are you satisfied with current plans for its introduction into the fleet?

General **Barrow**. The full-scale development model which started flying in November has lived up, indeed exceeded, all expectations. The pilots have good words for it. We are very optimistic that we are on the threshold of acquiring a very modern, very capable VSTOL aircraft that is quite different from its predecessor.

For example, the AV–8B is 65 percent easier to fly than the AV–8A. the pilots all comment in that area.

If you ask me if we have concern, again we go back to what I was saying when I talked to Senator Rudman about competing requirements. You have already heard the Secretary allude to the fact that we are not buying enough aircraft. If we had our druthers there are a lot of things we would like to do.

We believe, for example, that the procurement line for the AV–8B is not in the best interest of the Marine Corps in terms of earlier modernization of the light attack force, as well as probable drive-up of unit cost. We had hoped to have 24 AV–8B's in this fiscal year 1983 budget you are considering; but the budget finally ended up to be 18. Next year it was to be 54, but it ended up to be 30, and there are 10 less in 1985.

You can call these realities, whatever, that is the fact. It is not the best way, as we see it, in terms of timely modernization and keeping down the unit cost.

Senator **Kasten**. Mr. Secretary, I'm interested in your geographic distribution of Navy spending. Was that just for the aircraft carriers?

Senator **Lehman**. That is the overall shipbuilding account.

Senator **Kasten**. I look forward to working with you. Right now Wisconsin is dead last of the 50 States in terms of defense spending. We have some outstanding industries in our State and I hope we'll be able to do more business with the Navy.

Mr. Chairman, I have some questions that I would like to submit for the record.

Senator **Stevens**. Yes, of course.

Senator **Kasten**. I would like to congratulate the Secretary and all the gentlemen for what I think has been one of the most outstanding presentations we've had before this committee.

Senator **Lehman**. Thank you, Senator.

Senator **Stevens**. Thank you.

Senator **Stennis**. Mr. Chairman, I have some prepared questions, too, that I want to submit for the record with the understanding they will have the attention of these gentlemen and supply the answers for the record.

Senator **Stevens**. Mr. Secretary, Admiral, General, we will submit the questions for all of the committee members. They are more detailed questions, I believe, rather than the policy-type questions we have been trying to pursue this morning.

CORRESPONDENCE

Let me pursue one or two last ones. Admiral, I asked Admiral Rickover to give us a response to the question concerning the alternatives to the current Naval Materiel Command Headquarters.

I have his response to me in January 1982. Without objection, I will put it in the record.

[The letter follows:]

DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND
WASHINGTON, D.C. 20362

IN REPLY REFER TO

January 27, 1982

Honorable Ted Stevens
Chairman, Defense Subcommittee
Committee on Appropriations
U. S. Senate
Washington, D. C. 20510

Dear Mr. Chairman:

The Senate Appropriations Committee's report on the fiscal year 1982 Defense Appropriation bill requires the Secretary of Defense, with the Navy, to report by 1 February 1982 on alternatives to the current Naval Material Command (NAVMAT) Headquarters, including its disestablishment by the end of fiscal year 1983. In a telephone call on 26 January 1982, Mr. Sean O'Keefe of your staff requested my views and recommendations on this subject.

I have long been of the view that NAVMAT headquarters should be disestablished. In 1976 I recommended the Office of Management and Budget (OMB) disestablish NAVMAT Headquarters and reassign many of its functions to the responsible Navy commands. The OMB staff that looked into this matter concluded:

> "The role of CNM (NAVMAT) and the NAVMAT staff should be limited and staffing substantially reduced... Operational and technical functions should be assigned to systems commanders, with resulting staff reductions in the NAVMAT staff ... (The NAVMAT) role in contract review and resource management should be limited; most should be done by systems commands ... The NAVMAT staff should be reduced by at least two thirds..."

Since that time, however, the NAVMAT Headquarters staff has nearly doubled, and now totals over 800 people. A substantial number of these people serve strictly overhead functions, existing only to support the NAVMAT office itself.

About fifteen years ago, the Navy's technical bureaus were reorganized into six "Systems Commands". The office of NAVMAT was created and superimposed on these systems commands, adding a new bureaucracy and more layers of management. According to its mission statement, NAVMAT is:

> "... a single, integrated material support agency under the Chief of Naval Operations with central responsibility and accountability for total weapon and support systems development, acquisition, improvement, and support, including human operator integration, depot maintenance, supply management, facility support and integrated logistics support planning and implementation."

Despite this charter, the NAVMAT organization, in my view, has done little to help solve the serious problems in weapons procurement and support. Rather, it has tended to impede progress because of the inefficiencies inherent in superimposing organizational layers on those responsible for work. Specifically:

a. NAVMAT decision-makers are too far removed from those familiar with the work. Passing information through extra layers of NAVMAT management delays work, wastes time, and dilutes responsibility.

b. In attempting to carry out its broad responsibilities, NAVMAT tends to become involved in operational functions even though often lacking technical expertise or direct responsibility for the work.

c. Although responsible for formulating policy, making plans and coordinating the systems commands, NAVMAT often merely passes down policy guidance from the Chief of Naval Operations, the Secretary of the Navy, or others. Caught between the systems commands and policy-makers at higher levels, it is impossible for NAVMAT to function as an effective policy maker or assume subordinate command responsibilities.

d. As a higher level staff, NAVMAT's civilian grade structure is likewise higher than in subordinate commands. As a result, some of the best people tend to leave the systems commands and project management offices, where they are badly needed, to obtain more lucrative jobs on the NAVMAT staff.

I recommend the Office of the Chief of Naval Material and the Headquarters Naval Material Command be disestablished. Although a few functions would require transfer to other commands, many could be abolished altogether as duplicating work done elsewhere. For example, overhead functions, existing solely to support the Naval Material Command itself, should be abolished. The NAVMAT-designated project management offices should be eliminated and their functions reassigned to the systems commands. In implementing these changes, strict controls should be established to preclude new management layers and the buildup of large staffs.

I am attaching for your information a copy of the draft report prepared by OMB but never issued in final form, apparently because of objections by the Defense Department. Although the material in the draft report is over five years old, the principles are still valid.

Sincerely,

H. G. Rickover
H. G. RICKOVER

CC:
Sen. Mark O. Hatfield
Sen. William Proxmire
Mr. Sean O'Keefe

REVIEW OF NAVAL MATERIAL COMMAND ORGANIZATION

AUGUST 1976

MANAGEMENT DIVISION,
NATIONAL SECURITY & INTERNATIONAL AFFAIRS

OFFICE OF MANAGEMENT & BUDGET

PRELIMINARY RECOMMENDATIONS.

OVERVIEW

- RECOMMENDATIONS ARE BASED PRIMARILY ON INTERVIEWS.
- RECOMMENDATIONS ARE BASED ON KEY MANAGEMENT PRINCIPLES:
  - -- PLAN EFFECTIVELY TO REDUCE CRISIS MANAGEMENT.
  - -- ESTABLISH STRONG ACCOUNTABILITY AS THE BASIS FOR CONTROL.
  - -- MINIMIZE LAYERING AND OVERLAP IN PROJECT AND OPERATIONAL MANAGEMENT.

-- STRENGTHEN DECISIONMAKING.

-- PROVIDE EFFECTIVE PROFESSIONAL DEVELOPMENT.

- ALL RECOMMENDATIONS MUST BE TAKEN TOGETHER AS A COMPREHENSIVE, INTERRELATED PROGRAM.

SPECIFIC RECOMMENDATIONS

1. THE NAVY SHOULD SET A HIGH PRIORITY ON BUILDING AND MAINTAINING A STRONG TECHNICAL CAPABILITY IN THE NMC.

-- A TECHNICAL ORGANIZATION IS THE KEY TO MAINTAINING AN ACQUISITION CAPABILITY DEVELOPMENT.

-- BUILDING THE TECHNICAL ORGANIZATIONS IN NAVSEA AND NAVAIR SHOULD HAVE THE HIGHEST PRIORITY:

(1) NAVSEA SHOULD STRENGTHEN NAVSEC AND CONSIDER SETTING IT UP AS A STAND-ALONE ORGANIZATION.

(2) NAVAIR SHOULD BUILD AROUND AIR-05'S TECHNICAL ORGANIZATION.

-- THE NAVY LABORATORIES SHOULD BE ASSIGNED TO APPROPRIATE USER SYSTEMS COMMANDS.

-- NAVMAT SHOULD BREAK ITS DEPENDENCE ON OUTSIDE CONTRACTORS FOR MANAGEMENT AND TECHNICAL SUPPORT.

2. THE ROLE OF CNM -- AND THE NAVMAT STAFF -- SHOULD BE LIMITED AND STAFFING SUBSTANTIALLY REDUCED.

-- THE NAVY SHOULD RETAIN THE CNM AS THE "CHAIRMAN OF THE BOARD" TO PROVIDE LEADERSHIP FOR MATERIAL COMMUNITY; AS INTERFACE WITH CNO, SECNAV, JLC AND OTHER SERVICES AND THE CONGRESS; AND COORDINATE AND RESOLVE CONFLICTS AMONG THE SYSTEMS COMMANDS.

-- PRIMARY STAFF ROLE SHOULD BE POLICY, PLANNING AND COORDINATION.

-- ROLE IN CONTRACT REVIEW AND RESOURCE MANAGEMENT SHOULD BE LIMITED -- MOST SHOULD BE DONE BY SYSTEMS COMMANDS.

-- OPERATIONAL AND TECHNICAL EVALUATION FUNCTIONS SHOULD BE ASSIGNED TO SYSTEMS COMMANDERS, WITH RESULTING STAFF REDUCTIONS IN NAVMAT STAFF.

-- THE NAVMAT STAFF SHOULD BE REDUCED BY AT LEAST TWO-THIRDS AND RESTRUCTURED TO PERFORM THE NEW ROLE; FOR EXAMPLE, CONSIDER CONSOLIDATING THE SEVEN FUNCTIONAL DEPUTIES, INTO TWO: DEPUTY AND CHIEF OF STAFF; AND DEPUTY FOR POLICY AND PLANNING.

3. THE ROLE OF THE OPNAV STAFF -- PLATFORM SPONSORS, OP-98, OP-09 AND OTHERS -- IN THE DEVELOPMENT-ACQUISITION PROCESS SHOULD BE CLEARLY DEFINED AND LIMITED.

-- FORMAL GROUNDRULES FOR OPNAV'S INVOLVEMENT IN WEAPON SYSTEM DEVELOPMENT-ACQUISITION MUST BE ESTABLISHED AND FOLLOWED -- INCLUDING A DEFINITION OF "SETTING REQUIREMENTS,"

-- THE RESPONSIBILITIES OF THE NMC PROJECT MANAGERS AND OPNAV PROJECT COORDINATORS SHOULD BE SPELLED OUT.

D

4. IMMEDIATE ATTENTION SHOULD BE GIVEN TO EVALUATING THE CIVILIAN PERSONNEL BASE IN NAVMAT.

-- RETENTION OF TECHNICAL PERSONNEL SHOULD RECEIVE PRIORITY -- PARTICULARLY ENGINEERING AND PROCUREMENT.

-- CONSIDER USING MILITARY PERSONNEL FOR SOME KEY CIVILIAN POSITIONS.

-- AN EVALUATION SHOULD BE MADE OF EFFECTIVENESS OF DEVELOPMENT-ACQUISITION ORGANIZATION AND THE MANAGEMENT OF HUMAN RESOURCES IN NAVMAT.

-- "ACROSS-THE-BOARD" CUTS SHOULD NOT BE MADE IN NMC -- RATHER NECESSARY CUTS SHOULD BE MADE SELECTIVELY.

-- IF NECESSARY, ARRANGEMENTS SHOULD BE MADE WITH CSC AND OCMM TO OVERHAUL THE CIVILIAN ORGANIZATION.

5. THE OVERALL CAPABILITY OF THE SYSTEMS COMMANDS SHOULD BE IMPROVED.

-- COMBAT SYSTEM DESIGN, DEVELOPMENT AND ACQUISITION SHOULD BE BETTER INTEGRATED WITH MAJOR SHIP PROJECTS.

-- A SEPARATE LOGISTICS COMMAND SHOULD NOT BE ESTABLISHED; LOGISTICS PLANNING SHOULD BE MORE CLOSELY INTEGRATED WITH DEVELOPMENT-ACQUISITION IN THE HARDWARE SYSTEMS COMMANDS.

-- NAVELEX SHOULD BE RETAINED, BUT ITS MISSION SHOULD BE CLEARLY DEFINED FOR C^3, SHORE ELECTRONICS, INTELLIGENCE PROGRAMS AND CROSS-CUTTING ELECTRONICS PROJECTS; SHIPBOARD ELECTRONICS SHOULD BE TRANSFERRED TO NAVSEA.

-- CONSIDERATION SHOULD BE GIVEN TO INTEGRATING COMPONENTS OF THE NAVAL SUPPLY SYSTEMS COMMAND INTO THE HARDWARE SYSTEMS COMMANDS -- SUCH AS AVIATION SUPPLY OFFICE AND SHIPS PARTS CONTROL CENTER.

-- THE HARDWARE SYSTEMS COMMANDS SHOULD STRENGTHEN THEIR EVALUATION CAPABILITY.

6. PROJECT MANAGER CHARTERS AND ORGANIZATIONS SHOULD BE STRENGTHENED.

-- PROJECT OFFICES SHOULD HAVE A STRONGER PERMANENT ORGANIZATION; HOWEVER, THE MATRIX APPROACH SHOULD BE RETAINED.

-- PROJECT MANAGERS SHOULD BE GIVEN MORE AUTHORITY IN SHIP AND AIRCRAFT DESIGN, DEVELOPMENT AND PROCUREMENT.

-- THE FEASIBILITY OF USING A MORE VERTICAL ORGANIZATION SHOULD BE TESTED WITH ONE OR MORE MAJOR PROGRAMS (EXHIBIT 8).

-- A SENIOR REPRESENTATIVE OF EACH MAJOR PROJECT SHOULD BE LOCATED AT THE SHIPYARD OR PLANT.

-- THE PROJECT MANAGER SHOULD PREPARE CONCURRENT FITNESS REPORTS OR EVALUATIONS FOR KEY INDIVIDUALS SUPPORTING HIM IN THE FUNCTIONAL ORGANIZATION.

-- PM'S SHOULD BE MADE AWARE THAT OF EXISTING REPROGRAMMING AUTHORITIES, E.G., FROM O&MN AND APN, SCN AND WPN ACCOUNTS.

7. TOP-LEVEL SUPPORT IN THE NAVY SHOULD BE GIVEN TO PROFESSIONAL DEVELOPMENT FOR MILITARY OFFICERS ACQUISITION-DEVELOPMENT, PROCUREMENT AND LOGISTICS MANAGEMENT.

-- OFFICERS IN PROJECT MANAGEMENT ORGANIZATIONS SHOULD BE GIVEN LONGER TOUR LENGTHS WITHOUT PENALIZING CAREER PROMOTION; SUCCESSFUL PROJECT MANAGERS SHOULD BE PROMOTED IN THE JOB.

-- THE WSAM PROGRAM SHOULD BE STRENGTHENED.

-- SENIOR URL OFFICERS (0-5, 0-6 AND ABOVE) SHOULD NOT BE ASSIGNED TO NMC WITHOU PREVIOUS TOURS IN WASHINGTON.

NEXT STEPS

1. CNM REVIEW FINDINGS AND RECOMMENDATIONS

2. OMB AND CNM MEET WITH CNO TO DISCUSS REPORT

3. CNM TAKE SEVERAL IMMEDIATE ACTIONS:
   - SET UP SPECIAL ANALYSIS GROUP REPORTING TO CNM AND VCNM TO WORK ON FURTHER DATA COLLECTION, ANALYSIS AND IMPLEMENTATION ACTIONS.
   - COLLECT DATA ON MATRIX ORGANIZATION AND CONTRACTING SUPPORT.
   - CNM INITIATE ACTIONS TO SOLVE CIVILIAN PERSONNEL PROBLEM.

4. IMPLEMENT OTHER RECOMMENDATIONS.

NAVMAT HEADQUARTERS

Senator **Stevens**. He says, "I have long been of the view that the NAVMAT headquarters should be disestablished. In 1976 I recommended the Office of Management and Budget disestablish NAVMAT headquarters and reassign many of its functions to the responsible Navy commands."

The OMB staff that looked into the matter concluded—and again I am quoting from his letter in which he is quoting from the OMB—"The role of CNM (NAVMAT) and the NAVMAT staff should be limited and staffing substantially reduced." It goes on to say, "The NAVMAT staff should be reduced by at least two-thirds."

Now, it is my understanding he went to the Joint Economic Committee and indicated that the whole Office of the Chief of Naval Materiel could be eliminated with no adverse impact on the Navy.

Could we have your point of view on that?

Admiral **Hayward**. Yes, sir, I would be pleased to provide it. At the request of the committee, this past year we have reassessed the NAVMAT headquarters. Actually, over the last year to year and-a-half the headquarters has been reduced substantially at our own initiative. It has also taken a $5 million cut which the Congress applied to the headquarters, and we are taking that cut in areas that are very, very difficult and in my judgment not in the best interest of good business.

They have to be taken that way because the headquarters is a very tightly run headquarters. The choice, if one eliminates the Material Command Headquarters, is to increase the overhead of the other systems commands, Navsea, Navair, the Naval Electronics Systems Command, and so forth.

The reason Admiral Rickover holds the position he does is largely because his organization was basically an entity unto itself. The same thing occurs in the strategic weapons section of our Material Headquarters. It is very much an entity unto itself. It has its own business managers; its own contract people; it has its own design engineers.

The rest of our business, which comprises the vast majority of NAVMAT, is run with a central headquarters that does the business analysis, cost estimating and the contract support in order to hold down the overhead, in order to be more efficient. Material Command Headquarters exists to provide a more consistent way of doing business, and to provide a "devil's advocate" that is constantly checking the performance of the systems commands.

It is a proper way to run a business, in my judgment. I think it would be a significant error if we cut the headquarters any more, and to eliminate it would do irreparable damage to the way we do our business.

The Secretary might want to comment on that.

Secretary **Lehman**. I fully agree. I think that the necessity should be apparent that a noninvolved manager oversee the business aspects of a project rather than the project office itself. Of necessity, if the project office, doing its job, it has to get immersed in its own cosmos of that project, that weapons system or whatever it is. NAVMAT is our management oversight tool and I think it would be disastrous to have it gutted.

Senator **Stevens**. Admiral Rickover indicates that the civilian grade structure in NAVMAT is substantially higher than that in the subordinate commands, and as a result, it causes promotional capabilities that attract people from those subordinate commands and leaves them in effect stripped of the experience that they need. That those experienced people could do a much better job if they had the potential for promotion within the commands in which they have the experience and the training.

What do you say to that?

Secretary **Lehman**. I think that is an overly parochial view from Admiral Rickover's own organization's perspective. We have a great deal of mobility between the systems commands and NAVMAT, and elsewhere in the Navy as well. It is not as if they are totally sealed career structures. I therefore, just do not think there is a great deal of merit in that criticism.

PERSONNEL TRANSFERS

Senator **Stevens**. When you streamlined NAVMAT, Admiral Hayward, how many people did you eliminate and what kind of money did you save?

Admiral **Hayward**. Well, the specifics of that I would like to provide for the record. It is quite a number of people that were moved.

[The information follows:]

NAVMAT Headquarters Personnel Reductions

Between July 1981 and March 1982 the NAVMAT headquarters was reduced by 337 civilian and military personnel as shown in the table below:

	Authorized end strength	Transfers	Revised end strength
Civilian	778	317	461
Military	166	20	146
Total	944	337	607

Admiral **Hayward**. But the money saved is not as direct in relationship to the number of people who were moved. We did not eliminate the people, we moved the functions back to the systems commands in order to respond to the interest of the Congress to have the headquarters be made smaller.

That is the point I was trying to make earlier, that if each systems command has its own full capability we are going to have to add sigificantly to their staffs. We moved all we felt we could afford out of the material systems headquarters down into the systems commands and the functions went with them, of course. Those functions are no longer being performed at the material command headquarters.

We do not believe there is any more room to cut that we can make. We went from 778 civilian personnel last year down to 461 this year in the material command headquarters. So, it is a substantial reduction.

INDUSTRIAL BASE CAPACITY

Senator **Stevens**. Last, Mr. Secretary, there has been concern expressed that the rate of expansion of ship construction exceeds the ability of the industrial sector to respond. I had a list of all of those that were going to be started.

We have 2 nuclear carriers, 2 Trident submarines, 2 attack submarines, 3 Aegis cruisers, 2 frigates, a second battleship reactivation, 12 new or other converted ships.

Now, what can you tell us about the studies, have you had any confirmation of your own studies that that kind of a ship construction program can be carried on by domestic industry without cost overruns and within your timeframe?

Secretary **Lehman**. Absolutely, Mr. Chairman. In fact, the opposite of your concern is our concern. The shipbuilding program, encompassing some 18 new construction and another 7 or so conversions, is probably about half what the current industry could handle and would like to handle. The problem is the reverse. We have a major crisis in the shipbuilding industry in this country because of the disappearance, in the last 2 years, of commercial business due to a variety of reasons, such as the dropping of the subsidy programs.

Senator **Stevens**. That is not what I am asking you. The industry is not there.

Secretary **Lehman**. No, the industry is there and it is now beginning to lose work at a drastic pace. Even with contracting this program out, into the downward-tailing yards we cannot prevent the loss of about 12,000 jobs over the next year in the industry. We may face as many as four or five major yards going out of business even with full funding of this program because of the loss of commercial business and the decline in naval shipbuilding over the last several years.

We are trying to salvage as much of the industrial base as quickly as we can before it disappears and before those workers go out of the industry into other industries with yards actually shutting down.

Our industry today could handle double the shipbuilding program that we are asking for. Our only regret is that we do not have the ability to fund a larger program to hold onto that mobilization base.

Senator STEVENS. I was told that the overruns in San Diego alone were 60 percent cost overruns on major ship overhauls; is that right? Or 80 percent, pardon me.

Secretary LEHMAN. The last four overhauls we have done averaging about $7.5 million a piece, have overrun some 80 percent. That is a problem that is worth the committee, perhaps at a later date, going into. The problem is not San Diego, specifically, but rather the impact of small business set-asides and other restrictions placed on us in doing and bidding ship repair work. Sometimes it requires us to put work where we would rather not put work. But that is a more detailed subject than this hearing should deal with.

The fact is, as I read into the record earlier, 15 ships delivered early last year under cost, with very fine performance.

Senator STEVENS. I do not want to get into our perpetual argument, others overruled me on that in terms of the *New Jersey*. I was told when the *New Jersey* was taken from Washington to California that the yard it was taken to then had to disgorge three vessels that were waiting for overhaul.

Secretary LEHMAN. Four.

Senator STEVENS. Four?

Secretary LEHMAN. Yes, four went to the private sector. It was a great benefit to the private sector to get those overhaul jobs.

Senator STEVENS. At substantial cost overruns, though.

Secretary LEHMAN. No, no, we just awarded the first of these, the U.S.S *Wilson*, on a cost-plus basis, to Portland, Oreg. So, there is no overrun on those jobs. In fact, we believe we will be able to bring them in at least at the cost of what they would have been done in Long Beach.

Senator STEVENS. Well, my staff tells me two of those four were just taken out of the overhaul program entirely, there is just no room for them.

Secretary LEHMAN. Well, I will have to review that. You know, we look at our overhaul backlog according to which ships really need the work the most. Whether specific ships move in and out of a given year's overhaul backlog is the subject of a number of factors.

We now have a very well-funded overhaul program. We are getting work into the private sector to save those yards and take advantage of the competitive environment which will avoid cost overruns. We are competing these awards, not sole sourcing or allocating them.

OVERHAUL COST OVERRUNS

Senator **Stevens**. That was the last subject, but I have another subject that has just been handed me, and I am intrigued because of the problem we ran into on the last oil pipeline. We had one instance there where there was a situation of falsely certifying welds that became an international concern, apparently because of the opposition to our pipeline.

I have been handed a story that indicates that there has been one conviction thus far, dealing with fraud by welding and weld certification subcontractors in the San Diego area, where certified welds have been falsified. That there are 11 subcontractors doing business with the shipyards there in San Diego that are under investigation now.

Can you tell us, does that have anything to do with the cost overruns in the San Diego shipyards, these allegations of improper activity in the private sector?

Secretary **Lehman**. That is a situation that is under review. In addition to the convictions that have been obtained, there are also a number of investigations under way. I would really prefer not to comment on those cases, but would only say that some of the difficulties we have experienced there, have their roots in perhaps pressures to allocate business to, what in the trade are called, bicycle shops under the guise of small business set-asides, some of the people really ought not to be in the business. I would not want to say any specific overhaul overrun was a direct result of one cause or another. But it is a problem we are on top of and we are vigilant to catch fraud.

I think that in San Diego, as in the rest of our major areas, it is by far a rare exception to find fraud. I am confident that we do find it when it happens and that it is not repetitive.

Senator **Stevens**. We will ask the FBI to give us an update on that. We certainly do not want to jeopardize any prosecutions, but it would be interesting to go into the question of what is causing these overruns and to get some understanding of whether there are the mechanisms in place to try to prevent repetition, particularly in the areas of fraud or abuse.

I think the committee would be very interested in that.

Secretary **Lehman**. Yes, sir.

Senator **Stevens**. Any further questions, gentlemen? Senator Stennis?

Senator **Stennis**. Mr. Chairman, I just want to say this, we have had a very forceful presentation here of what I think is a splendid program for the Navy, a splendid program. I do thank you.

These cautions about the money, though, planning of the spending of the money in the years ahead is a big problem. These gentlemen are capable and they will handle their part all right, I do not doubt that. But it is a matter that will plague you in future years, due to the budget growth and the outlays.

I think we have to get control of these fiscal affairs. I mention it because it has such a direct bearing on the military program.

The big trouble now are the entitlements, and we barely touched them. We have not really solved anything in connection with them.

By entitlements I mean these automatic due-bills every year which run into many billions of dollars.

MILITARY RETIREMENT

The military retirement pay is one of them. I have forgotten just what figure it is at now. It is no discredit to the military, but it is around $17 billion or more. Just a few years ago it was $1 billion dollars and now it is having to compete in the budget with many other requirements.

I really think seriously that you gentlemen ought to get a retirement system that will run on a better, sounder financial base than the present one. Keep the old one until it runs out, that is about the only practical suggestion that I can make. It is certainly an obligation.

But something has to be done in this field, I think, or we go right back where we are in now with financial affairs within 5 or 6 years. We go right back in unless we solve some of these basic problems.

I hope you can take that problem seriously.

Secretary **Lehman**. Yes, sir.

Senator **Stennis**. It is not just the Navy's problem, but from a naval standpoint, all this new development in the world in the last 2 years, I think you are responding to it. We have to give you the wherewithal to do it.

Thank you, Mr. Chairman.

Senator **Stevens**. Thank you, Senator Stennis. I do not know if the Senator even noticed, I have been working on, as chairman of the Civil Service and Government Services Subcommittee of Government Affairs a new retirement program for the whole Federal Government.

You have put your finger, as usual, on the problem. The Senator has great depth of insight into some of our major problems, and it is an incongruous situation where the military gets a 17-percent increase in pay but does not contribute to their own retirement, and those who do contribute to their own retirement get a 5-percent pay increase.

This is exacerbating in effect the retirement costs of those who do not contribute to the retirement system as compared to those who do. It is something that must be looked at. I have taken the personal position that military pay should be comparable to all sectors of the community and if it is, then retirement should not be a noncontributory progam as far as the military is concerned.

That, gentlemen, is coming at you—whether you like it or not—next year.

Secretary **Lehman**. Mr. Chairman, could I comment on that briefly?

Senator **Stevens**. Yes.

Secretary **Lehman**. I fully agree that military retirement needs an overhaul. But I would urge that, as you approach this problem, you bear in mind that military retirement is not a property right, a vested retirement, in the way that civil service or industrial retirement is. It is, in effect, a retainer that we pay for a mobilization asset. Ninety-eight percent of retirees were involuntarily recalled to active duty in World War II. That is an invaluable mobilization asset for us in the future. That is why it has to be treated differently.

Once we cross the line of making military retirement contributory, whether or not the amounts can be reduced and we go to 30-year retirement, which personally I favor for officers but not for enlisted, is another issue. Once you cross the line of property rights, by vesting them with contributions, then you no longer have the capability to recall them the way we did in World War II and the way we must be able to count on even more so, with an All-Volunteer Force.

Senator **Stevens**. Well, I appreciate that. The other side of that coin though is, the noncontributory retirement credits that come into the civil service retirement system from military service has been one of the most exacerbating things in the solvency of that system. It led to the Congress having to add to the civilian retirement fund last year some $11 to $13 billion to keep that fund solvent because of the number of people that are in the civilian side, which is a contributory plan, who carried into the civilian side—like myself—credits for service in World War II, or Korea, or Vietnam.

Those have changed the civilian retirement system so much that we must now do something to save the civilian retirement system. In doing so, I think we are going to be forced to do what the Senator suggests, address the retirement system for the Federal Government as a whole. But that is a later hearing.

Admiral **Hayward**. Could I comment very briefly on that?

Senator **Stevens**. Yes, sir.

Admiral **Hayward**. Senator, I really feel I have to make a point. Not that we should not examine carefully the retirement system it always should be subjected to review.

But I have a great deal of difficulty with the suggestion that the military people are not contributing to their retirement. Our people are working as hard as they possibly can all over this globe on a day-to-day basis, in ways that are totally unique and require great personal sacrifice. That is contributing to their retirement, in my judgment. They should not be considered as a financial——

Senator **Stevens**. That is basically unfair to those of us who are looking at the system. They contribute nothing to the cash basis of the retirement system. To say otherwise is misleading. They are contributing as all Government employees ought to, a full day's work for a full day's pay.

But we have supported, and we continue to support the concept of increasing military pay far beyond that of civilian pay in the last 3 years.

Admiral **Hayward**. If we paid military personnel by the hour anything like any other comparable job in this country, you would double their pay. Then you can take out the contribution toward retirement.

Senator **Stevens**. I think you ought to come up my way and look at some of the civilians who are in remote areas, that work 24 hours a day, 7 days a week, and they get paid for 40 hours. They are no different in terms of military, Admiral.

I think the justification for not having contributory payments for the military was on the basis that they were underpaid. In those days they were underpaid. We have now changed that.

As a matter of fact, the pay structure is totally out of balance compared to the civilian sector in terms of the pay increases. As I said, 17 percent compared to 5.5 percent. This year, 8 percent compared to what I think will be zero—I do not think the civilians will get any pay increase this year.

A couple of years of that, and you will have real attrition as far as the civilian sector is concerned. I think you already have it. You have a switch from civilian back to "blue suits" now on a pay decision, not because of anything other than increased pay.

There were days, and I am sure you would admit it, where it was the other way around. I saw it in my State where people were going out of uniform into the civilian sector and staying in the same position.

We cannot have pay be the determination of whether someone is military or civilian, it ought to be a policy decision in terms of force structure, and not be brought about by a disparity in pay. But we are getting there, Admiral. We certainly are getting there. Another year or so of disparity in pay increases and you will see it. I am confident you will see the drain from the civilian sector into the military to the detriment of the civilian side of the Government.

Admiral **Hayward**. Well, we are a long way from that today. People are still lining up to get civilian jobs and we are having to beat the bushes to get people to join the military and we have a tough time keeping them.

Senator **Stevens**. Well, as I said, with this economy, if it keeps up, you will not have the tough time. We will try to correct the economy for you so we can give you your problem back. How is that? [Laughter.]

SUBMITTED QUESTIONS

Senator **Stevens**. Thank you very much. The additional questions, requested earlier by members for inclusion in the record, will be inserted at this point.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

Additional Committee Questions

AIRCRAFT PROCUREMENT

QUESTION: Mr. Secretary, your statement defends the increase in aircraft procurement as a more economical production approach. To what extent will these economical production rates reduce the constant dollar unit cost of the four aircraft you mentioned (F-14, A-6E, C-2A, EA-6B)?

ANSWER: The constant FY 1983 dollar cost for the A-6E program has decreased from $24.2 million per aircraft for a total quantity of 161 aircraft in the FY 1982 Congressional budget, to $23.4 million for the quantity of 205 aircraft in the FY 1983 Congressional budget. There are two reasons for this decrease in constant dollar unit cost: the more economical production rate of 8 or 12 aircraft per year as opposed to 4 aircraft per year in last year's initial budget and savings due to multi-year procurement.

The EA-6B program has experienced similar savings. The constant FY 1983 dollar unit cost has gone from $51.5 million in FY 1982 (total quantity of 106 aircraft) to $48.1 million in FY 1983 (total quantity of 132 aircraft). The savings are due to the more economical production rate of 6 aircraft per year, rather than 2 aircraft per year as in the FY 1982 budget, and multi-year procurement.

The C-2 aircraft program's constant FY 1983 dollar unit cost has also decreased, from $21.7 million in the initial FY 1982 budget to $19.0 million in the current FY 1983 budget. This is due to savings derived from multi-year procurement, the elimination of R&D for a new COD aircraft by the decision to continue procurement of the C-2, and shortening the acquisition process by one year.

The F-14 program has changed considerably from the initial FY 1982 budget to the FY 1983 budget. In the FY 1982 budget, the program included procurement of 24 aircraft in FY 1982, 12 in FY 1983, 6 in FY 1984, and none in any subsequent years. In the FY 1983 budget, the quantity for FY 1983 is doubled (24 aircraft) and the program continues at a rate of 30 aircraft from FY 1984 well into the 1990's. Total quantity has increased from 469 in the FY 1982 budget to 845 in the current FY 1983 budget. Constant FY 1969 dollar unit cost (as shown in the SAR) of the total program has remained stable at $15.8 million. The constant dollar cost would have decreased with the additional quantities, but configuration changes for increased capability are being put into the additional aircraft. These changes include the Airborne Self Protection Jammer, AMRAAM missile provisions and radar improvements.

QUESTION: Your five-year plan for aircraft procurement rises from production of 288 in 1983 to 442 by 1987. What are the goals underlying this heavy Navy aircraft buildup?

ANSWER: For the most part, the basis upon which the increased aircraft procurement is structured is our plan to increase the Navy force structure from the existing 12 CVBG's to 15 CVBG's. The aircraft procurement rates established in the FY 83 APN Plan provide for the attainment of the thirteenth and fourteenth air wings within the FYDP years. Continued procurement at the out-year rates indicated in the plan will provide an aircraft inventory which will support the formation of a fifteenth air wing in the early 1990's in conjunction with the delivery of a fifteenth deployable carrier. Additionally, the procurement plan provides for the formation of the LAMPS III ASW helicopter force in conjunction with the delivery of our modern surface combatant Navy. The balance of the procurement plan is largely devoted to the modernization and maintenance of the presently authorized force structure.

QUESTION: When do these seemingly endless production increases begin to level off? And, can our economy continue to sustain these kinds of production increases and the operational dollars that will be required to support the expanding inventory?

ANSWER: The production rate can be expected to level off in about 1990 as the fifteenth air wing is formed; however, it must be noted that recent procurement history has not been at a level which is required to maintain a constant force structure and an acceptable force average age. On a long-term average, approximately 324 aircraft are required per year to maintain the existing force structure and approximately 349 aircraft will be required per year to maintain a force structure composed of fifteen air wings. I believe that this force is realistically attainable and supportable within the industrial base and within affordable budget levels.

STEAMING HOURS

QUESTION: Last year the Navy emphasized an increase in the number of steaming hours for the active and reserve forces. The current request assumes a decline of 1 1/2 days per quarter. What has led to this change in priorities?

ANSWER: The steaming hours, or OPTEMPO, reduction of 1 1/2 days per quarter reflects an effort to improve retention by providing U.S. Navy sailors more time in homeport following long deployments.

The decline in fleet steaming does not represent a significant change in fleet deployments, in the emphasis on training or in the material condition of the fleet. The FY 1983 President's Budget will fund essentially the same OPTEMPO as in 1982 for deployed units. The non-deployed ship OPTEMPO has been reduced by approximately two days per quarter to provide increased inport time for crews following long deployments. The average 1983 OPTEMPO will equate to 97% of the FY 1982 level, or approximately 40.2 days per quarter.

The deployment schedule has been intensive since late calendar year 1979, requiring select skilled personnel to make back-to-back deployments and most crews to remain deployed for longer than normal durations. Navy plans for FY 1983 include a one-time reduction in the non-deployed fleet tempo as a retention measure. This reduction will have the effect of increasing fleet readiness.

QUESTION: Coincident with the decline in planned steaming hours, the funding request increases by roughly $240 million. How is this increase possible in view of the decline in estimate of fuel from $52 per barrel to $50 per barrel?

ANSWER: The increase of $203.3 million shown in graphs used by Navy witnesses during FY 1983 appropriation hearings is misleading in that no recognition is given for the $42.5 million of stock fund credits provided for this program in FY 1982. The program increase is therefore only $187.8 million and is related to force buildup and support features other than fuel. Additionally, the inflation costs shown below include a decrease of $178 million for fuel over the FY 1982 program (price change for ships' fuel is $57 to $51/bbl vice the DOD composite averages quoted above). The increase of $187.8 million includes:

			$ Millions
Utilities increase related to reduced OPTEMPO (pier support)			19.4
Inflation			19.7
New program-improved battle dress for crews			26.5
Force Changes:			110.4
New deliveries FY 1983		110.3	
Annualized cost for FY 1982 deliveries		34.9	
Retirements/transfers		-34.8	
Charter Fleet Costs			19.9
SIRIUS Conversion	25.0		
Other	-5.1		
Increase for Depot Level Reparables (DLRs) and General Purpose Electronic Test Equipment (GPETE) based on supply experience			38.4
Strategic force support increase primarily due to extended operational intervals for submarines			11.6
OPTEMPO decline			-58.1
NET INCREASE			$ 187.8

COST ESTIMATE FOR NORWAY PREPOSITIONING

QUESTION: The first increment of funding for prepositioning of Marine Corps materiel in Norway was provided in the FY 1982 bill. What is the current estimate for this program?

ANSWER: The Marine Corps prepositioning program total costs were defined, for the first time, during development of the FY 1983 Budget submission. The total program cost (prior years FY 1981-1982 and projected five year funding estimates) totaled about $400 million in escalated dollars. Program costs have since been reduced as a result of DOD guidance that munitions to meet prepositioning requirements are subsumed in the total Marine Corps munitions program and as such are not additive requirements. This new guidance results in an estimated program value of $257 million (escalated dollars) of which $61.8 million has been budgeted from FY 1981-1983. The remaining program requirements will be addressed in FY 1984 Budget development.

MARITIME VERSUS LAND PREPOSITIONING

QUESTION: Couldn't this materiel requirement be met more cost efficiently through maritime prepositioning?

ANSWER: Analysis of alternatives to land prepositioning in Norway was conducted by DOD during the process that led to the determination that a land-based concept was preferred. Maritime prepositioning was one of the alternatives considered. When comparing 20 year life cycle costs of each alternative with corresponding force response time, DOD determined land-based prepositioning in Norway is the lowest cost concept which meets the desired force closure time. The maritime prepositioning alternative could result in more favorable force closure times but total costs for ship procurement and operations far exceeds the land-based concept. The storage facilities to be used in Norway will not be U.S. funded. NATO infrastructure or the Government of Norway will provide construction funds.

TRANSPORTATION PROGRAMS

QUESTION: The budget request reflects a $50 million increase in transportation costs for the Navy and about $29 million for the Marine Corps. What's led to this enhanced emphasis on transportation?

ANSWER: Of the $29 million, $24 million is directly related to seven major new procurement programs to be delivered in FY 1983 that require increased Transportation of Things (TOT) support. Additionally, the increase reflects costs associated with the prepositioning of Marine Corps material and equipment in Norway and the movement of materiels to the Marine Corps Logistics Base, Albany, Georgia, during FY 1983 to meet the FY 1984 Maritime Prepositioning Ships deployment.

Beginning in FY 1983, the Marine Corps will pay $3.4 million in first destination TOT for the procurement of ammunition to be delivered in FY 1983. The balance of $1.6 million accommodates carrier rate adjustments.

QUESTION: The volume of cargo for Military Sealift Command transport is planned to increase a marginal 2%. However, the funding request includes an increase of $70 million, or about 10%, for MSC operations. With the decrease in the average price for fuel how do you explain this disparity?

ANSWER: There is no direct correlation between fuel rates and rates used by MSC to bill its customers. A substantial portion of the MSC dry cargo is shipped under MSC shipping agreements where the rates are competitively determined. Therefore, MSC billing rates are a reflection of those projected costs.

BASE OPERATIONS SUPPORT

QUESTION: Secretary Lehman, the budget assumes that over 7,600 civilian spaces will be eliminated by contracting for base operations support services. How much do you expect this will save?

ANSWER: The Department of Defense has experienced annual savings to the taxpayer approximating $6,000 per civilian space. Potential savings are approximately offset in the first year by costs associated with the conversion to contract, but the savings are realized in the second year. Since the cost comparison includes costs to the Government such as retirement expenses, foregone tax revenues and so on, that are not reflected in the Navy's budget, we do not anticipate that the contracting will result in any reduction in the Navy's budget.

QUESTION: Why do you also need a 1,400 increase in civilian personnel?

ANSWER: The 1,400 increase is the net change between FY 1982 and FY 1983, and represents provision for substantial readiness-related increases as offset by economies and efficiencies such as contracting out.

Specific programmatic end strength increases prior to contracting adjustments include a naval shipyard staffing increase of about 5,000 positions, which will allow us to reduce the bow wave of ship overhaul deferrals to an operationally constrained level by end FY 1983. Employment at naval air rework facilities will increase by about 900, which will permit further improvement in the aircraft readiness rate and largely eliminate the backlog of aircraft maintenance. Supply activity staffing will increase by about 1,700 to allow us to proceed with supply system modernization and provide quicker response to fleet needs. Increases of about 500 in ordnance activities will facilitate weapons readiness. Marine Corps civilian staffing increases of about 1,200 will expand readiness/sustainability support consistent with Fleet Marine Force growth. Other net programmatic adjustments are primarily in such areas as industrial research, fleet activities, supervisor of shipbuilding, conversion and repair offices, and investigative activities.

By accommodating these readiness initiatives through a modest net end strength increase, which also reflects substantial offsetting economies and efficiencies, the Department of the Navy will significantly enhance its capabilities within an essentially level civilian end strength posture.

PROGRAM TERMINATIONS

QUESTION: You highlight the cancellation of 40 marginal Research and Development (R&D) programs in your statement, but also state that " the dollars saved are being redirected to the most promising development programs." Which programs are you referring to?

ANSWER: The 40 marginal Research and Development programs mentioned in my statement were cancelled in the course of development of the FY 1983 Navy Program and Budget. As this was a budget development action where we were considering more programs than could be included within our budget guidance, funds associated with programs cancelled were not moved to other programs per se. All of these terminations were part of our effort to reduce our overall total to stay within guidance or budget constraints. Thus, it can be said that any of the programs included in the President's Budget are the "most promising development programs" as opposed to the lower priority, higher risk, or less promising programs which were not included.

QUESTION: Can we consider this "redirection" of RDT&E funds as a cushion which you have set up for these other programs? Or did real requirements serve as the incentive for these increases?

ANSWER: Unfortunately, in the current Budget development process we cannot afford the luxury of establishment of a cushion for any purpose. The Navy R&D Budget, as well as all aspects of the Navy Budget, are based on requirements. We are faced with hard choices, and with the necessity of striking a balance that will allow us to make substantial progress toward the solution of our most critical, immediate problems, (e.g., our personnel and readiness problems), and at the same time to support sufficient RDT&E to ensure our longer term security. Thus, we cannot support all of the R&D requirements, no matter how much we would like to do so. Only the higher priority R&D requirements and the most promising developments will be included.

VTXTS

QUESTION: Last year Congress approved $5 million for the VTXTS advanced trainer program. This year your request is for $9.7 million. Is this amount sufficient to move the program forward?

ANSWER: Yes, $9.7 million will be sufficient for a restructured VTXTS program.

QUESTION: What is the status of the Navy review of the VTXTS advanced trainer program?

ANSWER: The Navy expects to complete its restructuring and review of the program by the middle of April 1982.

QUESTION: Is the Navy considering carrying a second contractor through the pre-full scale development phase of the program, as was directed in the appropriations conference report?

ANSWER: The selected system proposed by McDonnell Douglas/British Aerospace based on the Hawk aircraft was determined to offer the greatest potential for development to meet our requirement. Continuing the competition with a second contractor through the pre-full scale development phase would add an additional unprogrammed $5 million in FY-82 and $24 million in FY-83 to the cost of the program. Continuing the competition with a second contractor offers little potential of changing the ultimate result. If program costs escalate during the pre-full scale development phase, the program will be canceled. We would then procure additional T-2C aircraft to continue meeting our training needs until another development/acquisition program could be undertaken.

QUESTION: What would be the impact of a canceling of this program on future Navy trainer objectives?

ANSWER: If the current VTXTS program is canceled, the Navy would experience training aircraft shortfalls beginning in the late 1980's. The aircraft shortfalls would become increasingly severe as the existing T-2C's and TA-4's begin reaching the end of their service life in the early 1990's. These shortages would seriously impact our ability to produce the number of new jet carrier pilots the Navy requires. In order to meet the training requirements in the late 1980's, the Navy would buy a limited number of T-2C's as an interim measure until another development/acquisition program could be undertaken.

NAVAL GUNFIRE

QUESTION: Mr. Secretary, you give amphibious operations a high priority in your written statement. What R&D efforts are you initiating in the area of naval gunfire support for amphibious operations?

ANSWER: The Navy's most important achievements in naval gunfire -- by a wide margin -- are not in the R&D field but in the recommissioning of four IOWA-class battleships, each with nine 16" guns, the most effective shore bombardment and fire support weapons ever developed.

For our existing 5"/54 guns, which are distributed among active fleet ships, we are introducing the HIFRAG projectile. These new projectiles provide increased range, lethality, and effectiveness against soft and lightly armored targets.

QUESTION: Can you explain why you decided to terminate the 5-inch laser guided projectile? What replacement are you considering?

ANSWER: The recent termination of the planned procurement was triggered by a large, unexpected cost increase in the 5" semi-active laser guided projectile (GP) program. This event caused a major review of this system and its relative priority among all Navy RDT&E/acquisition programs. As a result of this review, the program will be terminated after completion of RDT&E for affordability and priority reasons. It costs too much.

SEAFIRE

QUESTION: Could the 155mm gun with a semi-active laser use the SEAFIRE electro-optical fire control system?

ANSWER: A 155mm guided projectile could use the SEAFIRE laser and illuminator for terminal guidance.

QUESTION: Why was SEAFIRE terminated, if it can be used with other guns?

ANSWER: The principal requirement for SEAFIRE development was for an E/O sensor fire control channel to use with guided munitions. Cancellation of the GP procurement program as a result of significant cost growth reduced SEAFIRE to an ancillary E/O subsystem. This system, though remaining a firm requirement, was not justified alongside other urgent and higher priorities.

QUESTION: Do you consider SEAFIRE a "marginal" system?

ANSWER: The SEAFIRE E/O Fire Control System can provide target verification and identification, damage/kill assessment, low elevation tracking; the system can assist in navigation, station keeping and CW agent detection. However, other available systems can also perform these functions. SEAFIRE is a line-of-sight system which requires the ship platform to operate close to enemy ship or shore based threats which are becoming increasingly effective at short ranges. In addition SEAFIRE's effectiveness is degraded by adverse weather and obstructed visibility. Thus, without a requirement for guided munitions illumination, the requirement for a SEAFIRE system assumes a low priority among all surface programs. Therefore, in a period of limited resources, SEAFIRE can be considered marginal without SAL GP.

Question: What is the Marine Corps' position?

Answer: The Marine Corps supports development of Seafire for fielding and use with the five-inch semi-active laser guided projectile. The Marine Corps believes a gunfire support ship should have the on board capability for target designation when firing guided projectiles.

FY 1982 SUPPLEMENTAL

QUESTION: The FY 1982 supplemental proposes transferring $37.2 million from the R&D account. What programs are being cancelled to allow for this transfer?

ANSWER: Specific programs were not cancelled to finance the proposed transfer. Rather, FY 1982 funds from programs which were cancelled during the FY 1983 budget review were made available for FY 1982 shortfalls. The specific programs cited for transfer are:

P.E.	Program	Proposed Reduction ($000)
11221	Linear Chair	-3,999
64607	Seafire	-17,100
64353	VLS ASROC	-15,131
64514	Dual Mini Sins	-996
		-37,226

QUESTION: What prompted the decision to transfer these funds to the O&M account?

ANSWER: During development of the FY 1983 budget, programs considered to be of marginal value at that time were cancelled by the Navy to make funds available for higher priority efforts. Subsequently, FY 1982 funds made available through termination of these programs were proposed for transfer to the Operations and Maintenance, Navy appropriation for the Navy's most urgent FY 1982 shortfalls.

QUESTION: How will the funds be distributed among O&M programs?

ANSWER: The transfer of $37.226 million from the Research, Development, Test, and Evaluation Navy appropriation to the Operations and Maintenance, Navy apporpriation will partially offset O&M,N FY 1982 program supplemental requirements of $229.1 million. The distribution of the transfer amount among the various O&M,N programs requiring supplemental funding was not specifically integral to the financing methodology used by the Department of Defense.

MK-48 ADCAP

QUESTION: Please discuss the restructuring of the MK-48 ADCAP torpedo program for the record.

ANSWER: The MK-48 ADCAP program has been restructured to reduce the risk in meeting cost, schedule and technical performance criteria. A great deal of overlap between development phases has been removed.

The procurement schedule has been changed to purchase only long lead material and tooling in FY 1984. A detailed work breakdown structure analysis with subsequent independent validation has provided accurate costs to completion and a revised program schedule in which we have a high degree of confidence.

More stringent management control measures have been placed in effect. A stronger management team is in place in the Naval Sea Systems Command Program Office. The major contractors have assigned more qualified and experienced management personnel with full cooperation of the highest corporate levels. The program manager is developing contracting strategies which will emphasize cost reduction measures.

The Secretary of the Navy has addressed letters to the Chairmen of the Subcommittees on Defense of both Appropriations Committees and to the Chairmen of both Armed Services Committees which state his confidence in the restructured ADCAP program and provide the results of the detailed cost estimating effort.

F/A-18

QUESTION: The Navy is asking for procurement of 84 F/A-18s in FY 1983, yet there still is $109 million requested in the F/A-18 R&D program. What is this $109 million to be used for?

ANSWER: The $109.2 million F/A-18 RDT&E request for FY 1983 is summarized as follows:

$67.8 million - MCAIR
- $26.5 million close-out FSD
  - -- $5.0 million potential award fee due MCAIR
  - -- $15.7 million costs due suppliers upon completion of qualification tests
  - -- $5.8 million weight reduction program completion
- $41.3 million planned FY 1983 effort
  - -- $15.0 million structural ground test
  - -- $14.3 million engineering
  - -- $12.0 million maintenance support of Navy flight testing

$10.5 million - General Electric
- $4.5 million close-out FSD
  - -- $1.5 million potential award fee due General Electric
  - -- $3.0 million rotor life improvement program
- $6.0 million planned FY 1983 effort
  - -- $6.0 million support of Navy flight testing

$30.9 million Navy
- $ 4.0 million carrier suitability
- $ 1.0 million High AOA testing
- $ 9.0 million ITER compatibility
- $ 2.0 million AMAC development
- $10.0 million software support
- $ 2.0 million support of cost reduction
- $ 0.7 million electromagnetic compatibility
- $ 2.2 million miscellaneous (weapons accuracy, cross wind landings, HARM, etc.)

$109.2 million total

QUESTION: How do you justify increasing procurement of F/A-18's at a time when major R&D tasks remain?

ANSWER: The Congress provided funds for 63 aircraft in FY 1982 and advanced procurement funds for 66 aircraft in FY 1983, but expressed concern over rising unit costs. The Conference Report on the Authorization Bill directed the DOD to review the program closely prior to the FY 1983 budget request and to take appropriate steps to reduce unit costs. The Conference Report on the FY-82 Authorization Bill encouraged DOD to consider increased procurement rates as a means of achieving unit cost reductions. The Navy has complied with Congressional intent by increasing the FY 1983 request to 84 aircraft.

The R&D tasks remaining to be accomplished are low risk envelope expansion tests and tests of initiatives to reduce costs. All major problems have been corrected and tested.

ALWT

QUESTION: Does the Navy intend to examine foreign-source alternatives to advanced light-weight torpedo (ALWT) this year?

ANSWER: There is presently no foreign source alternative which meets the mission requirements for the ALWT. All available system alternatives, including foreign options, were considered when the decision was made to proceed into advanced development with ALWT in 1979. These alternatives will be considered again at the ALWT Decision Milestone to enter Full Scale Development. This milestone is scheduled for April 1983.

MARINE CORPS HELICOPTER

QUESTION: General Barrow, you call the development of a new helicopter to replace CH-46s and CH-53s your number one priority. Last year the Appropriations Conference denied R&D funding for a new Marine Corps helicopter. Why shouldn't we do the same this year, given the fact that the Marines are getting 11 CH-53s this year and the joint services rotary wing development program has been started with the Army as the head service?

ANSWER: The Marine Corps has insufficient CH-46 and CH-53A/D assault helicopters to fulfill our fiscally constrained medium lift requirement. The approved CH-53E procurement will provide us three additional heavy transport helicopter squadrons to fulfill our lift requirement to support the ship-to-shore movement and land war tactical displacement of the new M198 155 millimeter howitzer batteries. Our heavy lift requirements also include support for transport of the Light Armored Vehicle (LAV), Mobile Protected Gun System (MPGS), elements of the Field Logistics System and assorted combat engineering equipment. In our Fiscal Year 1984 budget request, we intend to ask for procurement of additional CH-53Es to support these super heavy lift requirements. Our medium lift assault requirement cannot be fulfilled by the CH-53E helicopter. The medium lift assault requirement (V/HXM) as stated in our Mission Element Need Statement, was approved by DOD in 1981. Our intention is to develop and field an assault vertical lift aircraft in the medium weight and speed class by the early 1990s. Our Fiscal Year 1983 request, along with a related Fiscal Year 1982 reprogramming request, will support the initiation of the Joint Service Advanced Vertical Lift Aircraft (JVX) program under Army leadership in order to fulfill the V/HXM requirement. The Army's Fiscal Year 1983 funds will provide support for the JVX program office, RFP evaluation and preliminary airframe and engine engineering design efforts. Our Fiscal Year 1983 request will provide for in-house Navy support to ensure JVX marinization specifications are met and to begin integration of the avionics subsystems for the Marine assault and Navy Combat SAR JVX aircraft. The Services agree that the JVX program, by pooling requirements and resources, provides an affordable method of acquiring multi-mission aircraft of significantly increased capability.

QUESTION: What kinds of off-the-shelf helicopters would you be looking at to augment the assault helicopter fleet?

ANSWER: The Naval Air Systems Command is currently evaluating the need for off-the-shelf helicopters to augment our assault inventory. Our intention is to arrest the inventory decline which is caused by aircraft attrition. Our decision will be a function of the projected JVX IOC date and the state of our CH-46 and CH-53A/D inventory gap until that IOC. The evaluation is primarily focused at providing a "gap-filler" of either CH-46 or H-60 helicopters to offset the attrition of troop assault helicopters; it will not meet the need for an aircraft of significantly increased capability, which is the thrust of the V/HXM requirement and purpose of our participation in the JVX program. A CH-46 procurement would have the limited purpose of providing interim troop assault helicopters to replace attrition losses until the JVX introduction. An H-60 procurement would serve three purposes; interim troop assault helicopters, a modern production hedge against JVX delays, and a potential long-term UH-1N replacement. A decision on the size and nature of this "gap-filler" will be made this Spring and will be reflected in our Fiscal Year 1984 budget request.

QUESTION: When would a new helicopter, using the tilt-rotor technology, be ready for use by the Marines?

ANSWER: The JVX technical assessment, currently underway with Army, Navy, Air Force, Marine Corps, NASA and industry participation, is reviewing the applicable technologies for a medium weight class vertical lift aircraft with a significant increase in speed and range over conventional helicopters. The tilt-rotor is a leading contender. Technically, an Initial Operational Capability (IOC) of 1990 may be achievable; but that would assume a development free from technical problems and the usual programmatic restrictions and impedences which accompany new technology projects. The program plan is being solidified but, at this point, it would be too early to categorically state when the IOC can be achieved. It would be prudent to expect an IOC in 1992.

QUESTION: Isn't this the most expensive solution, in terms of R&D investment?

ANSWER: It will probably cost more to develop than would a state-of-the-art helicopter; but it will also provide a much greater capability. The costs of developing either tilt-rotor or advancing blade concept (ABC) technology are about equal, although there are some major differences in areas of performance strength. The JVX, as a joint service program, promises to be much less expensive than pursuing independent Service developments for the multi-mission needs. By pooling funds and joining requirements, JVX will provide a common aircraft of significantly greater capability than conventional helicopters with enormous potential for a wide application in other missions.

MEDICAL R&D

QUESTION: What is the Navy position on consolidation of its infectious disease research programs into the Army's medical R&D program?

ANSWER: If properly implemented, the Congressionally-mandated consolidation can work to the advantage of all three services. Proper implementation would include a mechanism for joint program formulation taking into account the specific requirements of Army, Navy and Air Force. Without a joint formulation approach, consolidation would have a deleterious impact on Navy's reserach capabilities and the support they provide to the operating forces. It is essential for Navy to continue to operate its own research facilities, as specified in the Conference Report, if Navy is to perserve its important research capability. A jointly-developed implementation plan, agreed to in concept by the Army and Navy Surgeons General, will provide for sustained Navy activity.

QUESTION: Could other similar consolidations be accomplished within the R&D programs of the services?

ANSWER: Since the necessary administrative arrangements have only recently been initiated to accomplish the mandated consolidation of the infectious disease research programs, there have as yet been no opportunities to assess the results of that action. Further consolidations without benefit of such an assessment would certainly be premature. The ASBREM was formed in FY 1981 as a result of Congressional guidance on the Medical R&D program in DOD for the purpose of coordinating the best blend of medical research to benefit the needs of all services. Their efforts are just beginning to have impact and they obviate any urgency to accomplish other consolidations.

CINCUSNAVEUR REDUCTION

QUESTION: Admiral Hayward expressed some concern during our deliberations on the FY 1982 bill that the proposed reductions to the staff of the Commander in Chief, U.S. Naval Forces in Europe may be deleterious. In addition, he directed that a survey of the headquarters staff be conducted to reevaluate the personnel requirements. Are there any preliminary results from this survey?

ANSWER: The survey of the staff of Commander in Chief, U.S. Naval Forces in Europe, conducted by the Navy Inspector General, has been completed and a decision made to reduce the staff by 86 billets. Implementation of this decision is currently underway.

MANPOWER

QUESTION: Under the budget proposal, active Navy personnel increase about 28,000 or 5 percent, for FY 1983 and about 12,000 for the following year. Overall, what are the immediate and long-term cost implications of these manpower increases?

ANSWER: The FY 1983 strength levels increase by 28,000 over FY 1982 and the immediate cost implication of this increase is approximately $217 million in the Military Personnel, Navy appropriation. From FY 1984 to FY 1987, Navy strength increases from 593,300 to 615,000; over the FY 1984-87 timeframe, these personnel increases will cost approximatley $2.6 billion.

QUESTION: Mr. Secretary, you have stated that the expanded Naval manpower is necessary to support an additional 21 vessels and 79 aircraft. How can that expansion be achieved when the Navy can't even overcome long-standing petty officer shortage?

ANSWER: By maintaining our present momentum, we will attain the manpower required to support a larger Navy and simultaneously reduce the petty officer shortfall.

Manning a larger Navy with sufficient officers and petty officers of the right skill mix is our primary manpower and personnel challenge. Our strategy to meet this goal is founded on the following key elements:

- Maintaining basic pay levels competitive with alternative careers.
- Continued support for our Selective Reenlistment Bonus program, which provides a target incentive to those skills most in demand in the private sector.
- Continued emphasis on improving our sailors' quality of life.
- Continual examination of our personnel management policies to ensure balance among the skill areas and prevent any surpluses as inventories increase.
- Maintaining the commitment to increasing our Pride and Professionalism.

QUESTION: If retention is improving, why do we see a 40 percent real growth in reenlistment bonuses for FY 1983? Shouldn't bonuses decrease as retention improves?

ANSWER: The FY 1982 budget for new payments is $224.4 million and $240.6 million in FY 1983. The Navy currently has a 17,000 petty officer shortage. The growth of the program was based upon the reduction of that shortage to 8,000 petty officers in FY 1987 while at the same time increasing the petty officer base to sustain a 15 battle group Navy. The compensation initiatives of the 96th and 97th Congresses have provided substantial impetus to grow the petty officer inventories required, however, they alone do not provide sufficient incentive to reach our goals in the time required.

The FY 1983 SRB program has been sized to provide those additional petty officers. We will be using the SRB only where it is needed to fulfill our force profile. For example, the Navy's recently completed FY 1982 Mid-Year Review recommends a reduction of bonus levels in 21 ratings, with these dollar savings being applied in 12 other ratings with persistent inventory deficiencies. Given satisfactory retention and sufficient inventories to apply those retention rates to, reduction of bonus levels may be possible as early as FY 1984 or 1985.

QUESTION: Pilot and navigator shortages are cited as justification for the requested $41 million in aviation bonuses, which is not authorized for FY 1983. But the Navy also cites improved pilot and navigator retention. If retention is up, why the bonus request?

ANSWER: Navy does have improved aviator retention. For example, pilot retention has increased from a low of 30 percent in FY 1980 to 42 percent in FY 1981, and is estimated to reach 45 percent in FY 1982. This was a result of the compensation and ACIP improvements of the 96th and 97th Congresses and use of the new aviator bonus authority. However, the Navy still has a severe mid-grade (03-05) aviator shortage. To eliminate this shortage while expanding the force will require two actions over an extended period: 100 percent attainment of Pilot and NFO training rates and maximum retention of career aviators. Navy currently projects elimination of the mid-grade aviator shortage in FY 1989 for pilots and FY 1984 for NFOs. The continued use of the aviator bonus is essential to achieving these projections.

QUESTION: If pilot and navigator shortages exist, how do you plan to overcome them and man an expanding air arm?

ANSWER: We plan to overcome the current aviator deficits through increased retention realized as a result of the aviation bonus and 100% attainment of pilot and NFO training rates. For example, pilot retention has improved from a low of 30% in FY 1980 to 42% in FY 1981 and is projected to improve further to 45% in FY 1982. Our programmed pilot training rates have been increased from 897 in FY 1981 to 1133 in FY 1984. With the combined impact of higher training rate attainment and increased retention, we can man an expanding air arm.

PERMANENT CHANGE OF STATION (PCS)

QUESTION: Congress has twice refused to increase PCS mileage to 16¢ since it has not been shown that auto operating costs exceed the present 13¢ allowance. Why the third request?

ANSWER: The House report on the FY-82 Defense Appropriations Bill directed the Services to establish a formula which would equitably reimburse military members for costs associated with the operation of privately owned vehicle (POV) for Government directed travel. Gas, oil, maintenance, tires, an equitable portion of license and taxes and depreciation not to exceed 50 percent of the full depreciation allowance were to be included in the formula. In response to this directive, Service representatives reviewed the current methodology used to derive the cost of operating a POV. Sources of information included the Per Diem, Travel and Transportation Allowance Committee, The General Services Administration, Department of Transportation, Hertz and Runzheimer and Company. While average operating costs vary among organizations, careful analysis revealed that the most representative and widely respected data on business travel reimbursement came from Runzheimer and Company Inc. Since Runzheimer data is used extensively by other organizations, both in the public and private sector to derive adequate reimbursement for automobile travel, this data was incorporated into the Congressionally directed adjustment mechanism. The utilization of current Runzheimer data in the Congressional mandated guidelines for a mileage formula justified reimbursement of 16.17 cents per mile. A breakdown of the mileage costs is as follows:

Variable Costs		
Gasoline	8.6¢	
Oil	.2¢	
Maintenance	1.3¢	
Tires	.87¢	
Total Operating Costs		10.97¢
Fixed Costs		
Depreciation (50%)	4.7¢	
License & Taxes (50%)	.5¢	
Total Fixed Costs		5.2¢
Resultant Cost Per Mile		16.17¢

Recent improvements in PCS travel entitlements have alleviated out-of-pocket PCS costs to members. However, Navy members are still experiencing out-of-pocket costs in excess of $200 million annually for Government directed travel. The above computation justifies a PCS mileage rate of 16 cents per mile.

ACCOMPANIED MARINE CORPS TOURS IN OKINAWA AND IWAKUNI

QUESTION: Why do you want to increase the number of accompanied Marine Corps tours in Okinawa and Iwakuni, Japan? What is the total annual cost of this policy?

ANSWER: The increased number of accompanied tours in Okinawa and Iwakuni, Japan, for the most part, convert one year unaccompanied billets requiring annual turnover to three year assignments for one individual. The new initiative should enhance overall readiness by reducing personnel turbulence, increasing billet continuity and stability, and improving morale. Total costs and savings (fewer rotational moves) are currently being refined, however, new family units account for the major costs necessary to support this new policy. Based on current and programmed funding for the Japanese Facilities Improvement Program, it would appear that all or most of this cost may very well be funded by the Japanese Government. In fiscal year 1983, 5.6 million additional dollars are budgeted for permanent change of station and station allowance costs associated with this new program.

REPROGRAMMING

Close to $60 million was reprogrammed from Navy basic pay and quarters allowances in FY 1981.

QUESTION: Why was there so much surplus funding in these basic accounts?

ANSWER: When the initial FY 1981 estimates were derived, actual FY 1979 data was utilized; the subsequent FY 1981 estimates in the FY 1982 submission were based on updated FY 1980 actual experience which indicated increases and decreases in various items of pay when compared with the initial request. The net decrease resulting from these changes was used to reduce the FY 1981 supplemental request.

QUESTION: What have you done to avoid more overbudgeting in this area?

ANSWER: The Navy has modified the development of personnel plans so that they coincide more closely to actual performance. The estimated requirements for pay entitlement are based on the latest actual performance for the individual pay items. The following table reflects the amounts available and the amounts not utilized for the pay and allowances portion of the Military Personnel, Navy appropriation and indicates a significant improvement in the accuracy of the Navy's funding estimates.

($ in Millions)

Fiscal Year	Available	Unobligated	% Unobligated
1977	5,799.9	56.5	0.97
1979	6,447.0	28.4	0.44
1981	8,355.4	3.5	0.04

The measures taken to relate estimates to recent actual experience should prevent the need for such significant reprogrammings as were necessary in FY 1981.

SELECTIVE REENLISTMENT BONUSES (SRB)

QUESTION: A 1981 Naval Audit Service Report says more controls are needed so that selective reenlistment bonuses are applied to only those ratings where experienced personnel losses are the greatest. The report says 222 bonuses totaling $2.2 million were paid to retain people in overmanned occupations. What has been done to correct this problem?

ANSWER: The conclusions drawn in the Naval Audit Service Report are based solely on reenlistment rates and did not consider the manning levels in those skills. The bonuses in question were paid to Data System Technicians (DS) and Ballistic Missile Fire Control Technicians (FTB). In FY-1981 these ratings were manned at 81% and 65% respectively and are currently manned at 73% and 66% respectively through February 1982. Reenlistment rates are considered in bonus determination but only in conjunction with manning in each zone, total career manning and replacement costs.

Navy continues to review all aspects of a rating's performance in determining if a bonus is appropriate and therefore does not base its determination solely on retention rates.

QUESTION: The same audit report stated that certain bonus recipients do not serve in skill specialty targeted by the bonus. For example, 59 submariners getting bonuses totaling $680,000 rotated to recruitment positions where their technical skills were not used. The report recommended that bonus reenlistees be kept working in their skills. What has the Navy done to correct this abuse?

ANSWER: In order to provide a reasonable sea/shore rotation balance it is necessary for Navy to assign bonus recipients into billets not specifically requiring their technical expertise, but which do require their petty officer leadership attributes.

A mixture of all ratings and specialties are needed for recruiting duty in order to have experienced, knowledgable petty officers from each warfare community to support all of Navy's recruiting programs. For example, without submarine personnel available for recruiting duty the ability of a Recruiting District to recruit submarine field candidates would be significantly reduced. Although the billet does not require the utilization of his technical skills, he still performs a vitally important service in attracting recruits into highly demanding and critical specialties. Upon completion of thier well-deserved shore duty these individuals are reassigned to their technical specialty.

QUESTION: If the Navy is controlling the problem, why do we see no decrease in bonus payments?

ANSWER: With improving retention rates and sufficient inventories to which those rates can be applied, bonus payment decreases will occur. Retention rates are currently at or very near goal, however, current careerist inventories are well short of the inventories required. Thus, these relatively high retention rates must be sustained for several years in order to eliminate our inventory shortfalls. As the inventories approach required levels we will see decreases in the SRB programs. Our current plan anticipates this occuring in the FY-84/85 time frame.

The SRB program remains our most cost effective retention tool to obtain needed petty officers in critical skill rates. It is the only tool available to target resources to specific ratings or skills at three different career decision time points.

QUESTIONS SUBMITTED BY SENATOR KASTEN

TANKERS

QUESTION: You'll be procuring at least five new tankers under a charter arrangement over the next few years. What is the status of that program? How far along are you with the bids?

ANSWER: Offers under the RFP (Request for Proposals) issued by Military Sealift Command for the T-5 replacement tankers are due on May 3, 1982.

QUESTION: How much of the ship and its components have to be made within the U.S.?

ANSWER: Since the ship will be licensed for the coastwise trade, Coast Guard regulations require that the major components of the hull and superstructure be of U.S. manufacture, and that at least 50 percent of the cost of all machinery (including propulsion) and components which are not an integral part of the hull and superstructure be related to items procured in the United States.

QUESTION: Is there any requirement that the engines be procured from U.S. companies?

ANSWER: There is no requirement that the main propulsion engines be procured from U.S. companies.

QUESTION: Would a low-speed diesel engine be compatible with this ship?

ANSWER: That compatibility would depend on the individual ship design of each shipyard and/or the preference of the ship owner.

QUESTION: I understand that under previous charter arrangements, the Navy chose an operator primarily on the basis of the financing package he put together and then exercised some influence over the subsequent choice of the shipbuilder. This time the Navy is going to make its decision on the basis of total packages submitted by the operators for the cost of financing, building and operating. Why did you decide to proceed in this manner for this particular program?

ANSWER: It was decided that allowing private owners to offer total packages would avoid potential disputes or claims between the Navy and shipyards and reduce the time required to complete the procurement process.

QUESTION: Will the decision be made solely on the basis of low-bidder or will the past performance of the shipbuilder included in each package be considered?

ANSWER: Contracts will be awarded to responsive and responsible offeror(s) submitting the lowest cost proposal(s) for the construction and time chartering of five tankers. The capability of the shipyard will be considered only as an element of responsibility, but no additional weight will be given to an offer utilizing a shipyard with outstanding past performance.

LSD-41

QUESTION: How many LSD-41 class ships are being requested this year?

ANSWER: One LSD-41 class ship is requested in the FY 1983 budget.

QUESTION: Is that program proceeding on schedule and at cost?

ANSWER: The LSD-41 program is on schedule and at cost.

TRIDENT

QUESTION: What would the effect be of slipping the second Trident this year?

ANSWER: The exact cost and schedule implications can only be estimated at this time as the impacts of any contractor adjustments of schedule as a result of the Navy not exercising the option for the second FY 1983 ship are unknown. Current estimates indicate the cost of the SSBN 736 (the 11th OHIO class submarine -- the second requested in FY 1983) would increase by at least $341 million and the ship would deliver a minimum of four months later if procured as an FY 1984 ship. Of this amount, $225 million is directly attributable to not exercising the existing priced option. SSBN 737 (the 12th ship) would then deliver a minimum of eight months later and all subsequent ships would deliver a minimum of twelve months later with corresponding increases in price. The possibility exists that delaying the authorization of SSBN 736 until FY 1984 would result in contractor schedule adjustments that would also delay delivery and increase the cost of SSBN 735 (the 10th ship).

QUESTION: Can Electric Boat maintain the schedule for the second Trident?

ANSWER: The Navy currently holds priced options with firm contract delivery dates for two OHIO Class submarines requested in FY 1983. Assuming these FY 1983 submarines are authorized/appropriated, Electric Boat Division has the capacity and capability to support the contract deliveries for these ships.

LOW SPEED DIESEL ENGINES

QUESTION: How does the low-speed diesel engine stack up against medium-speed diesels in terms of performance and maintainability?

ANSWER: The merits of the two types of engines are still under contention in industry. The low speed diesel engine is generally bigger and heavier but it burns a cheaper grade of fuel, making it less expensive to operate. This same cheaper fuel, however, increases maintenance requirements and costs. The medium speed diesel is a smaller, lighter engine which burns a higher grade of fuel making it more expensive to operate but less expensive to maintain.

QUESTION: Has any decision been made as to which engine to buy for the new oilers?

ANSWER: Diesel propulsion has been specified for use in the TAO-187 class fleet oilers. The Navy is considering both medium and low speed diesel engines for this application and a final decision has not been made.

QUESTIONS SUBMITTED BY SENATOR D'AMATO

MARITIME STRATEGY

QUESTION: Would you explain to us what you mean when you talk about a maritime strategy?

ANSWER: Our maritime strategy is to establish command of the seas in those areas where U.S. interests are vital. It means we must be able to prevent the cutting of our sea lines of communication to those vital areas. This can be carried out only by possessing sufficient offensive naval striking power to defeat and neutralize those combined forces postured to cut those lines and interfere with that access. It requires clear maritime superiority and a forward strategy, a strategy which identifies and exploits Soviet weaknesses such as inherently unfavorable maritime geography. Our adversaries must know that if they initiate hostilities at sea, it is they who will be put on the defense.

QUESTION: Some have said that adoption of a maritime strategy is the first step toward a "fortress America" or "new isolationism." How do you answer those critics?

ANSWER: That is completely false. Our maritime strategy must guarantee free use of the seas. The vital interests which make up the boundaries of our maritime task are relatively straight forward and not subject to serious debate. They are provided by the network of some 40 treaty commitments entered into by the United States Government and by the new realities of energy dependency and our continued reliance on world markets for trade. These commitments bind our fortunes to all of the world's great waterways -- the North and South Atlantic, the Carribean, the Norwegian Sea, the Mediterranean, the Indian Ocean and Persian Gulf, and the Southwest and Northwest Pacific. Two of our states, Alaska and Hawaii, are not contiguous to our shores.

Our maritime strategy is a forward strategy, designed to protect these vital interests. It is designed to preserve access to our allies and friends while providing and supporting a flexible regional response, isolating Soviet continental power from the rest of the world, projecting allied power ashore, and prevailing in either a short or a prolonged war. Our naval forces complement our forward deployed land and air forces in deterring Soviet aggression worldwide.

TRIDENT PROGRAM

QUESTION: The Navy is responsible for the sea-based leg of our strategic triad. Are you satisfied with the progress the TRIDENT program is making?

ANSWER: Yes, I am extremely satisfied with the progress in this exceptionally important program. The constuction problems in the shipbuilding program which caused earlier delays in delivery dates have been largely resolved. The TRIDENT I missile reached operational capability on schedule in 1979 after a remarkably successful test and development program, and we are on schedule in the development of the TRIDENT II missile. The TRIDENT base at Bangor reached full operational status last year, and construction has already commenced at Kings Bay to support the second squadron of OHIO Class submarines and the TRIDENT II (D-5) missile.

QUESTION: If the MX program were cancelled, do you think the TRIDENT II, or D-5, would be able to perform essentially the same mission, if changes were made to the strategic command, control, and communications system?

ANSWER: The design goals for TRIDENT II specify an accuracy comparable to that of the MX and a warhead option whose yield will be about the same as that planned for the MX. This will enable the TRIDENT II missile system to be effective across the entire target spectrum as will be the MX.

The major improvements needed in the strategic command, control, and communications system are in the area of survivability and endurance: requirements that are not unique to the SLBM system. This is receiving priority attention in the President's modernization program.

It should not be inferred that I advocate substitution of the TRIDENT II SLBM system for the MX. In order to ensure a credible deterrent into the future we need some redundancy in our strategic systems to hedge against unexpected degradation in system performance, greater than anticipated threats, and to complicate the enemy's defensive problems. The issue, of course, is what the final mix should be: a decision dependent on many complex but interrelated factors such as targeting objectives, individual system characteristics and capabilities, the threat, and START considerations.

NAVSTAR GPS

QUESTION: Do you support the NAVSTAR - Global Positioning System Satellite Program?

ANSWER: The Navy fully supports the NAVSTAR Satellite Program in both concept and utilization. Letters of support were sent to congress from SECNAV on 23 October 1981 and CNO on 24 September 1981.

QUESTION: Do you feel that NAVSTAR is adequately funded and on a quick enough schedule?

ANSWER: The Navy has fully funded NAVSTAR RDT&E requirements and feels that this is adequate. The planned procurement schedule will meet the Navy user requirements and installation schedules.

AIRCRAFT PROCUREMENT NAVY

QUESTION: Are you satisfied that the aircraft procurement rates you have established will allow you to keep ahead of peacetime attrition while you build toward your 15 battlegroup goal?

ANSWER: Yes, the aircraft procurement rates established in the current FYDP provide for the attainment of the 13th and 14th air wings coincident with the delivery of USS VINSON and USS ROOSEVELT within the FYDP years. Continued procurement at the planned out-year rates will provide an aircraft inventory which will support the formation of a 15th air wing in the early 1990's.

F-14A REENGINING

QUESTION: Why have you decided not to press ahead with reengining the Grumman F-14A Tomcat?

ANSWER: The Navy has had problems with the TF30 engine in the F-14, primarily reliability, operability, and maintainability. In 1979, a three-part plan was initiated to address the problem: a Component Improvement Program (CIP) to fix those TF30 problems correctable within design limitations, a joint program with the Air Force to examine the F101 DFE engine, and another joint program to examine alternative, advanced technology engines. The CIP program has met most expectations and kits are being purchased. The F101 DFE demonstration program has just been successfully completed and the longer range study is still underway.

The decision to re-engine the F-14 will be based largely on affordability. It does not appear possible to retrofit existing aircraft with new engines, but switching to another engine for future production aircraft is an alternative under consideration should the improvements in the TF-30 engine not prove totally satisfactory.

AIRCRAFT MULTIYEAR PROCUREMENT

QUESTION: I understand that a principal stumbling block to effective multiyear purchases of tactical aircraft is the fact that the Government furnished equipment the Navy supplies to the contractor for installion on the aircraft is not purchased on a multiyear basis. What do you intend to do to reduce the difficulty caused by the scheduling and procurement problems with Government furnished equipment?

ANSWER: The Navy already purchases some government furnished equipment (GFE) for tactical aircraft on a multi-year basis. For example, the AN/APN-194 Altimeter Set and AN/ALE-39 Chaff Dispensing Set are presently under multi-year contracts.

Now that multi-year purchases of tactical aircraft are becoming a reality, the Navy is expanding its use of multi-year contracts for GFE for these aircraft in so far as good business practices and the budget allows. In general, GFE peculiar to an aircraft that is being procured on a multi-year basis should also be procured on a multi-year basis for firm requirements with yearly options to cover contingencies such as spares and trainers. Plans are being made to purchase selected GFE items for the F-14 via multi-year contracts beginning in 1984. A similar effort for A-6E peculiar GFE has also been identified.

While selective multi-year purchase of GFE for tactical aircraft increases savings to the government, the absence of multi-year GFE purchases does not constitute a stumbling block to the effective multi-year purchases of tactical aircraft. What is important is that GFE be delivered to the aircraft integrator on time and in good working order. Multi-year purchase of GFE will certainly make this task less laborious, but with good government and contractor management, GFE can be delivered on time and in good working order independently of multi-year purchasing policy.

The Navy is devoting a great deal of effort to improving its management of aircraft-related GFE. The Naval Air Systems Command is now introducing or has recently introduced several computer based systems to plan, track and report GFE purchases and deliveries. In addition, increased management attention is being focused on GFE status and problems.

VTXTS

QUESTION: As part of the Conference Report on H.R. 4995, the Fiscal Year 1982 Defense Appropriation Act, the Conferees directed the Navy "to continue a competition of two contractors through the end of the pre-full scale development phase using available funds to sustain a competitive pre-full scale development program" for the Navy's new Undergraduate Jet Flight Training System, or VTXTS. How does the Navy intend to comply with that direction?

ANSWER: The selected system proposed by McDonnell Douglas/British Aerospace based on the Hawk aircraft was determined to be the best to meet our requirements. Continuing the competition with a second contractor through the pre-full scale development phase would add an additional $29 million to the cost of the program and would offer little potential of changing the ultimate result. We will continue to keep open the option of buying more T2C aircraft to extend our replacement requirements into the nineties. Thus the Hawk will be competing in price against the T2C.

BATTLESHIP REACTIVATIONS

QUESTION: What are you doing to ensure that the lessons learned during the reactivation of the U.S.S. New Jersey are passed on to the yards which will be reactivating the other IOWA-class battleships?

ANSWER: Management, design and production feedback from efforts ongoing during the reactivation of NEW JERSEY are being utilized in the planning for IOWA and subsequent battleships. The lessons learned are being reflected in the design and specifications for the subsequent ships.

CONCEPT OF BATTLESHIP SURFACE ACTION GROUP OPERATIONS

QUESTION: Will you explain the concept of the operation of a surface action group centered on a battleship?

ANSWER: A surface action group (SAG) is defined by Naval Warfare Publications as two or more surface combatants assigned by an operational commander to conduct predetermined offensive missions. Such missions are generally of limited scope with specific objectives. Although a SAG is primarily anti-surface ship oriented in concept, its mission may include any warfare function within assigned units' capabilities. A SAG could be supported by a mixture of shore or sea-based aircraft, submarines, logistic ships or external sensors.

The survivability and sustainability of a battleship, when coupled with Tomahawk and Harpoon cruise missiles and its long range main gun battery, equip it well to operate independently with a group of anti-air and anti-submarine capable surface escorts. Missions of a battleship battle group or SAG could include:

- Response to crisis situation
- Interception of opposing surface forces
- Coordinated carrier battle group operations
- Countering opposing forces in crisis response
- Blockade or quarantine operations
- Support for amphibious operations
- Diversion or deception operations

AIRCRAFT CARRIER PROGRAM

QUESTION: It is currently fashionable to assert that the Navy could be more combat effective at less cost if it bought smaller, conventionally powered carriers rather than the large NIMITZ class nuclear power ships. Can you tell us how long it would take to complete a new carrier design and get it built, working under a crash priority?

ANSWER: A report, earlier this month to the Senate Armed Services Committee, Seapower Subcommittee, presented the results of over 45 aircraft carrier designs as both alternatives and as augmentors to our present force of large carriers. This report emphasized the CVN as the superior platform with the greatest warfighting capability. The report did, as required, indicate one smaller, conventionally powered carrier, that if directed, was the design more preferable than the others considered. That design was Study 45, a 44,591 ton class ship. Economic analysis has indicated that FY 1986 is the soonest that the detailed design/specification work could be completed and a contract award could be initiated. Start of construction is estimated to require an additional 9 months to a year. It is extremely difficult to estimate, with any degree of certainty, how long it would take to complete the construction of such a vessel under a "crash priority" basis. There are an unlimited number of assumptions that must be considered. Among these assumptions are: how many are to be built; what shipyards are to be used; what present ship-building priorities should be altered; can any shipyard adjust its present production schedules; and many other considerations. A detailed quality response cannot be provided without an extensive Commander, Naval Sea Systems Command and potential contractor business proposal/response exchange.

QUESTION: How much would such a notional carrier cost?

ANSWER: The Study 45 design report identifies that a lead ship of the 44,591 ton class would cost approximately $1,920 million in FY 1983 dollars under class F estimate definitions. Subsequent costs of follow-on ships are estimated to be $1,560 million for each unit.

CV/CVN O&S COST COMPARISON

QUESTION: Can you compare operations and maintenance costs between a medium sized conventionally powered carrier and a NIMITZ class vessel? Over the service lives of the two ships?

ANSWER: In FY83 budget dollars the annual operating and support costs of a NIMITZ class CVN are estimated to be $135 million. The annual operating and support costs for a conceptual conventionally powered carrier of approximately 40,000 tons are estimated to be roughly $115 million. Assuming a 45 year life for both ships, the lifetime operating and support costs are $6.08 billion for the CVN and $5.18 billion for the 40,000 ton CV.

LARGE VERSUS SMALL AIRCRAFT CARRIERS

QUESTION: How would you weigh the relative vulnerabilities of the two vessels, given today's space-based ocean surveillance systems?

ANSWER: We must differentiate between detectability and vulnerability. Without countermeasures, either ship could be detected by space-based surveillance systems. Countermeasures are available however, to obscure the ship's signal or to provide false signals, and therefore incorrect ship position. With regard to vulnerability, detection having been stipulated, the larger the ship, the less vulnerable it is. This greater survivability is a function of increased compartmentation, greater torpedo protection, more secure magazines and engineering spaces and greater redundancy in catapults, arresting gear and combat systems.

AIRCRAFT CARRIER PROGRAM

QUESTION: How would you compare the combat power of the two vessels?

ANSWER: Comparisons of the combat power of the CVN and the light carrier clearly show the CVN to be superior in every area. The primary combat arm of any carrier is its embarked air wing. The CVN air wing has a four-dimensional capability. That is, its embarked air wing consisting of over 90 aircraft is capable of simultaneously combating air, surface and sub-surface threats, and at the same time conducting strike operations against land targets. This capability exists because sufficient numbers of aircraft are embarked and supported. Additionally, the CVN air wing is capable of sustained combat operations because it is supported by a CVN which carries large reserves of aviation fuel and ordnance. In contrast, the light carrier, Study 45, a 44,591 ton class carrier, is envisioned to be capable of supporting an air wing with only 38 aircraft. Because of the reduced number of aircraft on board, only limited mission responsibilities can be assigned to it at any one time. Since the desired mission type aircraft would necessarily have to be embarked prior to putting to sea, the light carrier would not possess the four-dimensional capability which gives the CVN its great versatility. Additionally, the light carrier, which is dependent upon more frequent refueling and logistical support, could not sustain the lengthy combat operations of which the CVN is capable.

DIESEL SUBMARINES

QUESTION: It is also popular to assert that diesel powered submarines could do the same job our new Los Angeles class nuclear attack submarines do at less cost. Could you explain the difference in the missions a nuclear boat and a diesel boat can perform?

ANSWER: The four major attack submarine missions are forward area offensive operations including cruise missile land attack, barrier operations, sea lines of communications protection, and direct support of battle groups and other friendly forces. Diesel submarines are competitive with nuclear submarines in only one of these mission areas, the fixed anti-submarine warfare barrier, and even in that mission the diesel submarine's performance is degraded by hostile air anti-submarine warfare forces and environmental factors such as ice. Even in this single mission, a diesel submarine requires forward basing to achieve a procurement cost savings over an equivalent nuclear submarine.

QUESTION: Can we buy diesel submarines quickly and cheaply as some critics assert?

ANSWER: We cannot buy diesel submarines quickly or cheaply. The earliest a new design diesel submarine could be designed and built is about six-eight years. The diesel submarine is one-third as expensive as the nuclear submarine when considering unit procurement cost and about one-half as expensive when considering life cycle costs. Although less expensive, the diesel submarine is only cost effective in one of the four major attack submarine missions, the fixed anti-submarine warfare barrier role, and then only if overseas allied bases are available. The NATO countries and our other allies who are close to the barrier points at issue have a combined total of over 150 diesel submarines, most of which are well suited for barrier operations.

FRIGATES VS CRUISERS

QUESTION: It has been suggested that the Navy would be much better off buying large numbers of OLIVER HAZARD PERRY class frigates rather than spending $1.044 billion a copy for CG 47 AEGIS cruisers. What impact would a cutback in CG 47s have on the fleet?

ANSWER: Navy force level planning clearly recognizes that there are trade-offs between smaller numbers of higher capability units and larger numbers of less capable units. It also recognizes that numbers alone are not a substitute for individual unit quality if the capability of the units substituted is too low. Thus, a balance must be struck between capability and numbers. CG 47s and FFG 7s represent the high and low ends of the surface combatant spectrum in which this balance must be struck.

The CG 47 embodies the capability necessary to counter the threat of the late eighties and the nineties. In anti-air warfare in particular, it represents a major advance over present systems. It will be a key to the effectiveness of carrier battle groups, surface action groups, or in whatever tactical formation in which it is employed. Procurement of adequate numbers of CG 47s is critically important. Any cutback in numbers would seriously reduce the fleet's ability to perform its mission.

The FFG 7 represents no such quantum leap in capability. It was designed to operate in a lower threat environment against less capable adversaries or adversaries attrited by higher capability forces, i.e., CVBGs or SAGs. The FFG 7 does not, nor is it intended to have the capability to engage many of the more capable threats, current or future, that battle groups or SAGs might encounter. Accordingly, while we have requested and procured a significant number of FFG 7s, they are not adequate substitutes for higher capability CG 47s or DDG 51s, even if procured in much larger quantities.

BATTLESHIP REACTIVATION

QUESTION: Can you tell us what sort of progress the reactivation of the USS NEW JERSEY has been making.

ANSWER: NEW JERSEY's reactivation and modernization is proceeding on or ahead of schedule and within budget. The ship recently undocked early on 13 March and will conduct sea trials as early as September. I am extremely pleased with the progress to date and am confident that we will complete the job on time.

QUESTION: Are you satisfied that the battleship reactivation plan can be executed on time and on cost?

ANSWER: I am confident that NEW JERSEY will complete on time and on cost. It should be expected that our experience with NEW

JERSEY will enable us to likewise maintain a high level of success with IOWA, MISSOURI, and WISCONSIN.

QUESTION: What are your present plans for the reactivation of the USS IOWA?

ANSWER: IOWA will be modernized in a private shipyard on the East or Gulf Coast. The request for proposal for this job was distributed to prospective bidders in March 1982. Proposals are due back to the Navy in May and contract award is planned for July. Reactivation and modernization of IOWA is scheduled from January 1983 to January 1985.

GUNFIRE SUPPORT

QUESTION: What does the Navy plan to do, besides reactivate the battleships, to provide the gunfire support the Marines will need in making a forced entry?

ANSWER: In the context of a larger caliber gun system, Navy presently has no development planned, either 155mm or 203mm. However, the requirement to increase the effective firepower of our existing five-inch guns remains a priority. For example the Navy is already bringing the HIFRAG projectile into the fleet; the projectile is designed for greater stand-off range and more effective area fire than the ballistic HE rounds it replaces. We're looking at the Conventional Tomahawk Land Attack Missile as having a potential role in supporting a forced entry.

The Amphibious assault Fire Support Study is analyzing the combinations of existing forces and the subsequent effects of proposed weapons systems to the problem of moving an assault force across a defended coast. Using the results, an orderly ranking of priorities among various proposals should save false starts and, with the reality of scarce resources, prevent opportunties lost through inappropriate resource allocations.

LARGE CALIBER GUN SYSTEM

QUESTION: Does the Navy have a large-caliber gun system in development, or any other system which could serve the same function at an affordable price?

ANSWER: By recommissioning four IOWA-class battleships--each with nine 16" guns, the most effective shore bombardment and fire support weapons ever developed--the Navy is taking far more effective action to bring large-caliber guns to the fleet than could be achieved by any development program.

We are also carrying out a wide range of R&D programs aimed at supplementing the traditional reliance on gun systems for fire support. They include the AV-8B, F/A-18, LASER MAVERICK, IIR MAVERICK, HELLFIRE, the Marines' Light Armored Vehicle and Mobile Protected Gun programs, and TOMAHAWK Land-attack Missiles fired from Vertical Launching Systems.

QUESTION: Are you confident that you have adequate surge capability built into your aircraft production base so that heavy losses sustained early in a conflict could be quickly made good?

ANSWER: At this time, there are a number of existing problems that need to be resolved before the defense industrial base can respond to full mobilization. The foremost constraints to the acceleration of the base is skilled manpower and materials, followed by production equipment and manufacturing space. These constraints apply to lower tier producers as well as prime contractors.

The critical military items addressed here are aircraft and missile weapons systems which are sophisticated and complex, and generally do not lend themselves to a production surge. However, in order to show that some limited production surge is possible, I will quantify our surge production to a period of 12 months.

In the production of fighter and attack aircraft, where there is production currently underway, it is possible to surge from 20% to 50% by the end of a 12-month period. This variation in surge capability is caused by the type of aircraft in question, the current production rate (in the case of several aircraft out of production and in mobilization layaway, no production surge is possible) at M-day and the available open capacity to expand. For example:

Case 1 - a plant under production at two aircraft per month would normally produce 24 aircraft per year. With a surge production effort, the production could be 36 in that 12-month period (surge increase of 12).

Case 2 - a plant under production at three per month would normally produce 36 aircraft per year. With a surge production effort, the production could be 43 in that 12-month period (surge increase of 7).

The situation for a surge effort in missile production would be somewhat comparable to the conditions described above.

QUESTION: What steps are you taking to insure that an adequate aircraft production surge capability is available?

ANSWER: Some forthcoming potential improvements to increase surge capability in the aircraft production base include:

(a) Recently issued Secretary of the Navy directives to bolster the Navy's Industrial Preparedness Planning Program, including surge and mobilization production.

(b) Plans for equipment modernization funding in FY 83 and FY 84.

(c) In one specific case, a proposed technical modifications program at the Naval Weapons Industrial Reserve Plants in Bethpage and Calverton, operated by Grumman, commencing in FY 84 with joint funding and participation by the Navy and the contractor.

(d) Investigation/consideration/benefits of multi-year contracting, especially with the forging industry.

All of the above will assist in some measure to improve production surge capability. However, it has been determined by methodical planning and specific studies that calculated, substantive surge and mobilization production of such complex weapons systems as aircraft and missiles can only be realized through:

(a) Pre-stocking of critical, long-lead materials/components. This is a costly and difficult undertaking, but considered absolutely essential with the production limitations (suppliers/vendors) and long-lead times which prevail in the United States.

(b) Modernization of the Government-owned machine tools in the industrial base which today have an average age of 28 to 30 years with only 5% of this inventory being of the numerically controlled type (primarily early vintage numerical control with vacuum tube electronics).

(c) Selected augmentation of special rate tooling and special test equipment to allow for rapid expansion (surge) of manufacturing and assembly.

WARTIME INDUSTRIAL BASE

QUESTION: Are you confident that our shipyards could quickly begin replacing destroyed warships shortly after the outset of a conflict?

ANSWER: New construction would not be the first priority of our shipyards after the outset of a conflict. They would concentrate on accelerating existing construction and overhauls, activating reserve ships and repairing battle damage. Once this initial surge had been handled, attention would be focused on new ship construction.

Mobilization scenarios studied by the Navy indicate that facilities would be the constraining factor. Additional shifts and manpower would be used to accelerate ship construction, repair and overhauls. I am confident that our shipbuilding industrial base could respond adequately after the outset of a conflict.

WARTIME COMBATANT AND SUPPORT SHIP CONSTRUCTION

QUESTION: What steps are you taking to insure that American shipyards can respond quickly to the need for new construction of both combatants and support vessels?

ANSWER: The single most important step that can be taken to insure an adequate shipbuilding industry that can respond to emergency requirements is to provide the present base with an adequate, stable workload. The five year shipbuilding program presented to you this year will help do this. The program, along with enhanced acquisition policies, will lead to stabilization of the workload and a strengthened shipbuilding industrial base. This improved base will enable us to respond quickly to a national emergency.

INDUSTRIAL PREPAREDNESS

QUESTION: Is there a centralized program established within the Department of the Navy to manage industrial preparedness?

ANSWER: The Navy has an Industrial Preparedness Program which has been somewhat neglected in the past because of the short war scenario and lack of resources. The current long war scenario and emphasis on revitalizing the industrial base has led the Navy to develop a more comprehensive program with centralized management from the Secretariat level down. This program renews emphasis on Industrial Preparedness Planning with industry to identify production bottlenecks and develop detailed improvement projects required to enhance and maximize industrial base responsiveness. A Navy Ad Hoc Group has also been established to coordinate implementaton of Navy's program. We plan to have this program fully operational by FY 85.

QUESTION: What investments is the Navy planning to ease bottlenecks and establish stores of long lead materials to accelerate wartime industrial response?

ANSWER: We recently developed and submitted 15 industrial base improvement projects to OSD as candidates for funding from the DoD established industrial preparedness planning fund. DoD is also studying the feasibility of funding a surge production effort for several Navy programs. The EA-6B aircraft and Sparrow and Sidewinder missiles are currently being considered. Some productivity enhancing projects are also being funded by the manufacturing technology program. However, they are normally directed to improve peacetime capabilities and are not developed to satisfy wartime demands. The Navy plans to improve its awareness of production base deficiencies through more detailed industrial preparedness planning. This information will allow us to continue to support submitted projects and develop additional projects required to ease bottlenecks or stockpile long lead material needed to accelerate production in event of an emergency.

WARTIME SHIPBUILDING CAPABILITY

QUESTION: If the shipyards on the Gulf and Atlantic coasts which are within the operational range of MIG 23's based in Cuba were severely damaged or destroyed, what impact would that have on our naval construction capability?

ANSWER: Assuming a worst case combat radius (attack and return) for the MIG 23, several shipyards could be reached. (Deleted). (Deleted) a major auxiliary shipbuilder and (deleted) a major surface combatant and amphibious shipbuilder. The other yards within striking distance are primarily repair and overhaul yards. (Deleted) the impact would be a reduction in overall U.S. shipbuilding capacity and a reduction in repair and overhaul facilities in that area of the country.

PANAMA CLOSURE

QUESTION: If the Panama Canal were closed by hostile action, in your opinion, would we be able to properly respond to a military contingency in both the Atlantic and the Pacific on short notice?

ANSWER: Yes. Units of the Atlantic and Pacific Fleets are able to respond to hostile actions and military contingencies within their areas without reinforcement from the other ocean. The Panama Canal remains, however, an important defense asset in reducing the transit time of military and economic cargo and facilitates routine interfleet ship transfers.

COMMAND AND CONTROL OF RAPID DEPLOYMENT FORCE

Question: Are you satisfied with the present composition and command and control of the Rapid Deployment Joint Task Force?

Answer: The creation of any new major command is an evolutionary process. In the past year we have made substantial progress in enhancing the RDJTF's effectiveness. We have made significant headway in cleaning up the command lines and structuring the RDJTF. Since 1 October 1981, the RDJTF has been a separate command reporting directly to the NCA through the JCS. Service component Headquarters have been established, Army and Air Force forces have been assigned, and Naval forces identified for employment. The I Marine Amphibious Force, which includes the 7th MAB, will operate in support of, or under the operational control of, the RDJTF, as appropriate. A joint manpower program for the RDJTF Headquarters has been approved and the Headquarters is being staffed to meet its unified command responsibilities by January 1983. (Deleted).

As you are aware, the forces currently in the SWA region consist principally of naval forces under the operational command of CINCPAC. (Deleted).

PROTECTION OF MARITIME PRE-POSITIONING SHIPS

QUESTION: Do you feel that the Maritime Pre-positioning Ships are adequately protected against a surprise enemy strike?

ANSWER: Maritime Pre-positioning Ships or MPS are not war ships. They have no self contained war fighting capability. While they have military capabilities, such as over the beach offload capability, a balanced load of cargo, petroleum and water; they are still as vulnerable as most commercial ships because of their less refined damage control systems such as water tight compartments, fire fighting, etc; and lack of defensive weapons systems. Therefore, protection from enemy attack is dependent on US Navy or allied control of sea areas and anchorages wherein the MPS are operating.

I believe that the MPS can be adequately protected against a surprise enemy strike. Through use of our strategic and tactical intelligence systems, we can gain sufficient warning to prevent surprise and take action to intercept or neutralize enemy attacks.

PROTECTION OF DIEGO GARCIA

Question: Do you feel that Diego Garcia is adequately garrisoned to withstand a surprise enemy attack?

Answer: (Deleted).

INTELLIGENCE FOR PRE-POSITIONING

QUESTION: Pre-positioning is only workable when you have adequate assurance that you will have the lead time necessary to marry-up the troops with the equipment. That depends upon the quality of your intelligence. Are you confident that the United States will have the warning time necessary to make the pre-positioning strategy successful?

ANSWER: I am confident that we have the intelligence resources to make the pre-positioning strategy work. Use of those resources, and the decision making necessary to react to the intelligence indicators, is dependent on many factors which neither I nor anyone else can predict in advance. Having said that, however, I would like to emphasize that the beauty of maritime versus land pre-positioning is that we have the flexibility to move our material around as priorities change. We also can deceive potential adversaries through moving the MPS to different locations and, thereby, increase our chance of achieving surprise at a particular location where we employ a MPS Brigade.

CONCEPT OF AMPHIBIOUS LANDINGS

QUESTION: Given the existence of space-based ocean surveillance systems, how viable is the concept of large amphibious landings against a potential Soviet adversary?

ANSWER: Amphibious warfare promises to remain the art of the possible throughout the indefinite future. It is not difficult to postulate "worst case" situations in which amphibious forces--or any force for that matter--are thrown into the teeth of massed high technology opposition, resulting in questionable survivability. However, let's divorce ourselves from hypothesis and look at facts.

The first fact is that the existence of Soviet space-based ocean surveillance systems does not mean that the presence of every ship in the ocean is known throughout 24 hours of every day. As well as existence of some natural limitations to coverage, commanders at sea can take measures to offset and complicate surveillance efforts. Ocean surveillance systems are not "all seeing, all knowing."

Even if total omnipresence were ascribed to surveillance systems, another fact prevails: knowing the location of an amphibious fleet does not tell an opponent exactly where a landing will occur. For example, an amphibious force equipped with air cushion landing craft could approach Norfolk at dusk and by the next day's dawn conduct a landing anywhere between Montauk Point, Long Island and Myrtle Beach, South Carolina. Using Soviet planning doctrine, a Motorized Rifle Division would take about a week to deploy that distance. If a Soviet opponent chose to defend the entire frontage, his doctrine would call for about 43 divisions or about 25% of his entire national ground force.

Perhaps the most important fact is the one which begins to come into focus with the previous example: the threat of an amphibious assault creates a distraction that can tie down a disproportionate amount of a defender's resources. Strategist B. H. Liddell Hart illustrated this point vividly when he pointed out that in World War II over a third of Hitler's armies were guarding 8000 miles of European coastline by D-Day, but only a small percentage were in position at Normandy. The distracting effect is apt to diminish after a landing takes place, unless the exploitation is rapid. In fact, at Normandy the distraction effect did diminish after the landing. The threat of amphibious assault is a millstone around a defender's neck. Indeed, his surveillance systems could be used against him by subjecting him to amphibious demonstrations--feint landings--and simple amphibious "presence."

Another fact is the modern fleet's ability to defend itself in a hostile environment. Amphibious doctrine does not sail an amphibious fleet in harm's way barren of aircraft carrier, submarine, and all the support resident in the fleet. To submit that Soviet weaponry renders an amphibious fleet indefensible equally suggests that war at sea is untenable--a suggestion not borne out by facts.

In sum, amphibious flexibility is the greatest strategic asset that a sea-based, maritime power possesses.

Surveillance systems and new weapons may alter tactics and equipment; however, the strategic concept stands fast.

LANDING CRAFT AIR CUSHION

QUESTION: What are the Marine Corps' views on the future of Air Cushion Landing Craft?

ANSWER: I have previously testified that the Landing Craft Air Cushion (LCAC) portends a breakthrough in amphibious assault techniques almost as revolutionary as the helicopter. I am unwavering in my conviction that the Navy's LCAC program represents a conceptual and technological breakthrough in ship-to-shore movement that is vital to the future of amphibious warfare. The truly amphibious LCAC will be capable of launching from over the horizon in rough seas, transiting to the beach at over 40 knots with a 60 ton payload and offloading inland on firm terrain. The LCAC can operate independently of tides and bottom conditions which will expose four times more beaches to amphibious assault than are currently accessible by displacement craft.

The implication of these new capabilities is significant. Air cushion vehicles, because they are amphibians that cross the surf, in combination with helicopters provide tactical flexibility. The amphibious commander has a limited number of landing beaches to which he can make a slow speed run with displacement craft. The need to link up the helo and surface assault elements limits not only the surface craft options but also landing zone selection for helicopters. The benefits of geographically spreading the entire operation, giving the mobile amphibious forces an opportunity to mass superior firepower in key areas, establish a foothold and commence buildup ashore are clear.

Against a mix of 50 knot amphibian landing craft, displacement craft, and helicopters in a coordinated assault, the enemy must spread his defenses or rely on mobility. If he thins his forces he is subject to penetration and defeat in detail. If he relies on his mobility, his forces become susceptible to destruction by supporting arms. To the extent we continue to use displacement craft our ability to achieve this flexibility will be limited. The LCAC speed also allows us to move laterally along the shore as well as well offshore. Tactical surprise can be achieved from positions close to the beach, not just from over the horizon. If launched 50 miles from the beach, in one hour, the 50 knot LCAC can cross the beach in only one place. If launched 10 miles off, in one hour it can cross any beach along a 98 mile section of the coast.

Only air cushion technology offers promise of a dramatic improvement in surface assault capability. The LCAC is not the sole solution to reducing vulnerability in the ship-to-shore phase of the amphibious assault--but it is a very large part of the total equation. The Marine Corps is solidly behind this important program and supports fully the acquisition profile in the FYDP that will buy 48 craft by the end of FY 87.

AMPHIBIOUS LIFT

QUESTION: Does the Marine Corps believe the Navy is moving ahead fast enough in providing adequate amphibious lift to meet the declared strategy of this country?

ANSWER: The ability to define an adequate force level objective for amphibious shipping is complicated by the fact that the objective has been literally shrinking for the past decade. When strategic and fiscal requirements have come into conflict, the latter have consistently prevailed. Consequently, even though our strategic sights have been lowered, our amphibious force levels have declined at an even faster pace.

At present, the amphibious force possesses about half the lift capability that existed before the last (mid-1960) surge of amphibious ship modernization. Looking a decade into the future, the problem is further compounded by the impending block obsolescence of a majority of existing amphibious ships. We are faced with both a problem and an opportunity. The Navy has funded the first two of a projected 16 ship LSD-41 class and is well into the planning phase for the start of an eight ship LHD-1 program. A steady shipbuilding program, that stands in sharp contrast to the relative inactivity of the past decade, is required. The Marine Corps is programming firepower and mobility enhancements that it needs to fight and win on a modern battlefield, once ashore. Amphibious lift capability must keep pace. The impending decline through block obsolescence must be halted--and reversed.

NAVAL GUNFIRE SUPPORT

QUESTION: Are you satisfied that the Navy is doing enough to provide you with large caliber gunfire support capability?

ANSWER: I would be less than candid if I said that current gun systems meet Marine Corps needs for Naval gunfire support in amphibious operations. An amphibious assault requires all-weather fire support for pre-assault operations and for support of the landing force until its artillery is established ashore. The sharp reduction in Naval gunfire support capability in the past decade has left us with a current capability that is inadequate--both in range and lethality. Current five-inch guns with conventional projectiles cannot kill tanks and other hardened targets.

The five-inch GP, coupled with SEAFIRE (an electro-optical tracking and aiming device) would have regained some of the ground lost by the demise of major caliber guns in the Fleet. GP promises first round accuracy and kill of stationary and moving targets--including tanks. However, the GP and SEAFIRE programs have been cancelled.

Bringing in the GP and SEAFIRE programs would improve our current Naval gunfire capability. The reactivation of all four battleships will return major caliber guns to the Fleet, but a new gun development for all platforms presently equipped with the five-inch gun should be pursued as a matter of high priority.

AV-8B

QUESTION: Can you explain to us your needs for an AV-8B two seat trainer?

ANSWER: As you may be aware, the AV-8B is an entirely new aircraft and a vast improvement over the 1950's technology of the AV-8A/TAV-8A. The differences in performance and in pilot procedures far out number the similarities of these two aircraft.

We currently have seven TAV-8As in the inventory. These seven aircraft simply will not provide adequate training for the AV-8B transition-either in numbers or in training capability. After thorough analysis of our requirements, we have decided to procure a "stretched" two-seat version of the AV-8B (90%+ common with AV-8B) that will provide both excellent training and a combat capable two seater.

QUESTION: Why wasn't such a trainer in the budget as submitted?

ANSWER: When the budget was being developed, we were still reviewing our earlier decision to procure the less capable TAV-8A. That review, which clearly pointed to the combat capable TAV-8B, came too late to influence the fiscally constrained Fiscal Year 1983 R&D budget.

QUESTION: Why can't the British supply the trainer?

ANSWER: Contrary to our expectations, the TAV-8A line was discontinued at the British Aerospace Facility, Kingston. Current production is devoted entirely to the Sea Harrier which differs considerably from the USMC AV-8A/RAF GR-3 Harrier. Since the RAF has no plan to reactivate the TAV-8A line, the considerable cost involved would have to be borne by the United States. It is significant that the cost estimate of procuring TAV-8A exceeds slightly the estimate for developing and procuring much more capable TAV-8Bs; moreover, the delivery date for the TAV-8A would be two years later and would not meet our required training date of 1986.

USMC GROUND ELECTRONIC WARFARE CAPABILITIES

QUESTION: Are You Satisfied With Your Ground Forces' Electronic Warfare (EW) Capability?

ANSWER: I'm thoroughly satisfied that the current organization structure of our two Fleet Marine Force (FMF) Radio Battalions fully supports the necessary interrelationship of the Signals Intelligence (SIGINT) and Electronic Warfare (EW) roles in the conduct of offensive EW operations. However, I am not satisfied with the current capability of these units to carry out their SIGINT/EW mission in the present and emerging battlefield. The Radio Battalions, the FMF's (deleted) charged with the conduct of (deleted) operations in support of Marine Air Ground Task Force (MAGTF) commanders EW mission, continue to operate in a severely degraded mode, primarily due to:

(Deleted).

(Deleted).

These two problem areas are well recognized and we are making significant strides to correct these deficiencies. At this time last year, both Radio Battalions were in a (deleted). I can report that at this time both battalions are at or near (deleted). And, I would add, that even with these (deleted) both Radio Battalions carry on a very high tempo of operations in support of FMF exercise and real-world contingencies, always with a very high level of success within their current, critically limited capability.

The level of Electronic Counter Counter-Measures (ECCM) awareness of Marine Corps combat units continues to grow. These combat units continuously train and are tested regularly during FMF exercises to measure the level of their ECCM capabilities. It is of significant interest that it was a communications platoon of one of our infantry battalions that received the coveted Old Crows EW Award last year for EW excellence.

USMC GROUND ELECTRONIC WARFARE CAPABILITIES

QUESTION: What Are You Doing To Replace Outdated (EW) Equipment?

ANSWER: The Marine Corps has a two pronged strategy to modernize and/or replace our aged inventory of SIGINT/EW equipment in the FMF Radio Battalions.

1. Under the Radio Battalion Equipment Modification Program, current transportable SIGINT/EW collection equipment is being upgraded and enhanced to last until the mid-late 1980's when our new SIGINT/EW systems are fully fielded. To date:

(Deleted).

2. New SIGINT/EW equipment is being fielded or under development.

- The AN/GRR-8 portable receivers have been fielded and are in service.

(Deleted) IOC is FY84.

- The Integrated Signals Intelligence System (ISIS), a system that will replace all of our transportable collection equipment and provide an (deleted) is in the second year of development of the full-scale Engineering Development Model (EDM). IOC for the full system is FY88.

- Specifications for the ELINT Support System (ESS) are complete, and efforts are ongoing to let a contact during June of this year for development of the (deleted).

- The Mobile Electronic Warfare Support System (MEWSS), a program to integrate a suite of (deleted) is presently in the system development and specifications phase of the acquisition cycle.

- The Expendable Jammer (EXJAM) program is a joint Marine Corps/Army effort to develop (deleted)

(deleted). EDM prototypes of all three configurations have been developed and are undergoing joint service testing.

AV-8B

QUESTION: If AV-8B procurement could be accelerated, what delivery schedule would the Marine Corps prefer for that aircraft?

ANSWER: The September 1981 Selected Acquisition Report contained a procurement schedule considered to be the minimum production rate to meet USMC light attack requirements and is shown below:

Fiscal Year	1983	1984	1985	1986	1987
Number of Aircraft	24	54	54	54	54

QUESTION: What percentage of the Navy's FiscalYear 1983 outlays represents new starts?

ANSWER: FY 1983 new start outlays total less than one half percent of the Department of the Navy's total FY 1983 outlays.

QUESTION: How much could be saved in outlays this year by the cancellation of both new nuclear carriers and both new Trident submarines?

ANSWER: Only $161.5 million in FY 1983 outlays could be saved. Nuclear carrier cancellations excluding advance procurement would amount to $92 million in FY 1983 outlays saved and TRIDENT submarine cancellations would amount to $69.5 million.

QUESTION: How much could be saved in outlays this year by cancelling the three CG-47 AEGIS cruisers in this year's budget.

ANSWER: By cancelling the three CG-47 AEGIS Cruisers, $140.7 million of FY 1983 outlays could be saved.

QUESTION: Can you identify the systems the Navy was required to report to Congress for excessive cost growth under the Nunn Amendment?

ANSWER: These systems were the SSN-688 Class Submarine, the FFG-7 Class Guided Missile Frigate, the F-14A TOMCAT, the AIM-54A/C PHOENIX missile, the AIM/RIM-7M SPARROW missile, the AIM-9M SIDEWINDER missile, the TRIDENT I (C-4) missile, and the Five-Inch Guided Projectile.

QUESTION: Would you explain, on a system by system basis, the reasons for the cost growth?

ANSWER: The reason for the cost growth in most of the systems is mainly due to adjustments in quantities.

SSN-688: This program breached both the unit cost thresholds. The total program unit cost increase of 30.9% is primarily because of the addition of 12 ships (the total cost of these 12 ships reflect a greater compounded economic impact than ships previously budgeted, as seen in the constant dollar unit cost change of +2.1%), the Vertical Launch System (VLS), and associated outfitting and post-delivery requirements.

The FY 1982 SSN-688 procurement unit cost increase of 16.9% is due primarily to the additional advance procurement funding and extended FY 1977 funds authorized by the Congress, which artificially inflated the FY 1982 column. Subtracting these costs would result in a procurement unit cost change of only +0.8%.

FFG-7: The total program unit cost increase of 17.3% is mainly the result of the addition of 9 ships in the outyears to the total planned quantity, and decreased allowances for the procurement of selected equipments. The constant dollar unit cost change is only +3.5%.

F-14A: The total program unit cost increase of 79.0% is due almost entirely to the Navy decision to extend the F-14A acquisitions from a 509-aircraft program ending in FY 1983, to an 845-aircraft program ending in FY 1995. Also included are support costs for the additional 6-deployable squadrons and funds to enhance both the radar and avionics capability of the aircraft. The constant dollar unit cost change is -1.9%.

PHOENIX: The total program unit cost increase of 18.8% is based primarily on the increase in quantity of 1,302 missiles in the outyears. The remaining portion of the increased cost is made up of higher cost estimates associated with several missile components, funding to develop second sources for these components, and increased spares support. The constant dollar unit cost change is -11.9%.

SPARROW: This program breached both the unit cost thresholds. The total program unit cost increase of 31.9% is a result of a program restructuring dictated by technical and reliability difficulties that lead to the suspension of OPEVAL testing. The program was restructured to recognize the technical problems, the related additional R&D funding requirements, and the funding required to allow tooling of the second source to a higher rate than initially envisioned. In addition, Raytheon, the prime contractor, is losing approximately $10M on the AIM/RIM-7M development contract. Further, Raytheon has suffered severe losses associated with the AMRAAM development program, managed from the same corporate profit center as the AIM/RIM-7M. Also, the AMRAAM production contract was awarded to Hughes, Raytheon's competitor. These losses provide a disencentive for cost reduction for SPARROW and have contributed to the poor cost estimate provided by Raytheon. To counter this situation, second source fully-competitive procurement with General Dynamics for the Guidance and Control System is planned for FY 1983. Then the FY 1982 Congressional cut, due to their concern over the SPARROW testing difficulties, impacted the outyears by decreasing the number of missiles that could be procured. The constant dollar unit cost change is +21.2%.

The FY 1982 SPARROW procurement unit cost increase of 49.4% is a result of the Congressional cut of 320 missiles and the inclusion of funds for the initial production and start-up costs for the development of a second source.

SIDEWINDER: The FY 1982 procurement unit cost increase of 34.5% is due to a program restructure which necessitated qualifying a second source producer in FY 1982 instead of FY 1983. The 31 March 1981 SAR, which is used as the baseline, contained the notification, in the form of a footnote, of the change in the missile quantities from 910 to 700 in order to allow the second source qualificaion in FY 1982. However, in determining baselines, the higher quantity was directed to be used, thus provoking an automatic breach when the lower quantity was authorized. The actual unit cost change is only +2.8%.

TRIDENT I (C-4) Missile: The total program unit cost increase of 36.2% is due to the reduction of 309 missiles from the program as a result of the decision to develop a follow-on TRIDENT II (D-5) missile. The constant dollar unit cost change is +55.5%.

5-Inch Guided Projectile: The total program unit cost increase of 2,214.6% is due to the cancellation of the program and the elimination of 18,300 of the 18,441 projectiles planned for procurement. The remaining 141 prototypes have to absorb all the sunk costs.

QUESTION: Can you tell us what the Navy is doing to prevent the reappearance of any of these systems on the next Nunn Amendment report?

ANSWER: The only system with a legitimate cost growth as envisioned by the Nunn Amendment is the AIM-7M SPARROW Missile program. Resolution of the technical problems and the program restructuring have resulted in a procurement plan ready for full competition in FY 1983. A letter contract was awarded to establish a second source producer, General Dynamics, in December 1981. The contract provides start-up costs associated with development of this second source and production of 690 missiles (250 Navy/440 Air Force). A learning quantity of 20 missiles was awarded General Dynamics in FY 1980. General Dynamics has also been funded to redesign three key electronic subassemblies of the missile to enhance producibility and lower cost. It is expected that General Dynamics will be fully competitive with Raytheon for the FY 1983 production program. Encouraging and expediting this competitive environment is the principal Navy action underway to reduce costs. Competition is being fostered in sub-tier contractors as well as the primes, with 63 alternate sources being developed for missile components. Previous experience with the AIM-7F revealed reduction in costs upon introduction of competition.

QUESTION: Can you explain what "Budgeting to Most Likely Cost" means? Isn't that just another way to hide cost overruns?

ANSWER: No, it is a way to prevent overruns. In the past there have been numerous examples of programs incurring cost growth due to the use of overly optimistic cost projections. The purpose of the budgeting to most likely cost initiative is to encourage program managers/cost estimators to take a less optimistic view of pricing. In this regard we are encouraging the use of management reserves in situations where there is perceived to be significant price risk. Similarly, we have also received OMB approval to use higher inflation indices for major procurements. These plus other initiatives are designed to assure that the incidence of cost growth/overruns are reduced or eliminated.

QUESTION: Are you satisfied with the inflation allowance you have incorporated in your budget?

ANSWER: Yes, the current method of projecting inflation based more directly on economic events affecting industries providing military goods and services is a sound approach.

QUESTIONS SUBMITTED BY SENATOR STENNIS

NUCLEAR CARRIER PROCUREMENT

QUESTION: Secretary Lehman, you mentioned that the procurement strategy to fully fund two nuclear carriers in Fiscal Year 1983 will "significantly strengthen our vendor and contractor industrial bases." Is this really true, or are we about to embark once again on a "peak and valley" investment objective that has caused the private sector suppliers so many problems in the past?

ANSWER: The authorization and appropriation of two nuclear carriers in fiscal year 83 will enable the shipbuilder to buy two shipsets of equipment and plan the construction and use of manpower for two ships. This will provide the basis for stable workload planning in the shipyard over the duration of these contracts. This helps strengthen the industrial base. In a similar manner, the vendor base supporting these ships is strengthened by receiving firm orders for larger quantities over the duration of these contracts.

Ship and vendor contracts for future ships will provide continued stability in future years.

QUESTION: Would you detail how the $750 million savings come about? Is this primarily the savings from inflation that is gained by delivering the ships 22 months earlier than planned?

ANSWER: The information follows:

Reduced inflation - Approximately $304 million
Economic order qty. buying - Approximately $250 million
Productivity (reduced manpower) - Approximately $100 million
Reduction of start up, set up and other nonrecurring costs - Approximately $100 million

QUESTION: Admiral Rickover was quoted as saying that a nuclear carrier would have a very short life span, in his opinion, in the event of an all-out conflict. Would you comment on your view of the survivability of these ships?

ANSWER: The CVN by virtue of its size, design and extensive passive defense features is vastly superior to the light carrier designs studied to date. In respect to the survivability of the CVN in an all-out conflict, nuclear exchange, the CVN is the least vulnerable of all ships. Its superior armor, mobility, sophisticated damage control systems, larger embarked air wing, and the mutual support of other assigned battle group ships provide a substantial edge in survivability. In a nuclear exchange, everything is vulnerable to direct hits. Cities and bases are certainly more vulnerable because of their lack of mobility.

CARRIER BATTLE GROUPS

QUESTION: I believe you told the House Appropriations Committee that the Navy would have to deploy 16 aircraft carriers to achieve the 15-carrier battle group force recommended by the Administration. Is it possible the Coral Sea or the Midway, which are scheduled to be retired could be retained to achieve this force structure?

ANSWER: The current plan is to retain both CORAL SEA and MIDWAY in active status through 1989. The multi-ship production of CVN 72 and CVN 73 will provide two large deck modern CVNs that will allow the Navy the option to either replace these World War II vintage carriers or to further extend the service life of one or both and use CVN 72 and CVN 73 as force-building platforms. Both CORAL SEA and MIDWAY will be evaluated prior to 1989 to determine the feasibility of further extending their service lives. Because of the uncertainty associated with the future condition of these older ships, current planning calls for CVN 72 to replace CORAL SEA in 1989 and CVN 73 to replace MIDWAY in 1991.

QUESTION: Are you satisfied that sufficient carrier escort ships, such as nuclear cruisers, are requested in the current five-year plan to support the two carriers which are included in the Fiscal Year 1983 Budget?

ANSWER: Yes, I am satisfied that the Navy has programmed sufficient surface combatants in the shipbuilding plan to support an increase in carrier force levels. The shipbuilding plan continues to support the Navy's goal of 27 AEGIS cruisers, has included the lead ships of the DDG 51 class, and increases the number of DD 963 class ships. Subject to Congressional support for the current shipbuilding plan, the Navy will have adequate numbers of surface combatants by FY-89 to support a carrier force level of 15 ships. However, at that time we will not have completed delivery of all CG 47s in the pipline and only the lead DDG 51 will have been delivered. Therefore, we will have older and less capable ships in the battle groups until the DDG 51 class delivers in adequate quantities. To achieve required levels for Carrier Battle Groups and Surface Action Groups we will also have to use older and/or less capable ships in escort of the amphibious forces, convoy and underway replenishment groups. We will not achieve our force level objective of battle group capable ships until the CG 47s and DDG 51 class ships are delivered in the mid to late 1990s.

SOVIET MARITIME STRATEGY

QUESTION: Your detailed statement addresses the move by the Soviet Union to a global blue-water offensive maritime force. Yet they have not shown a dependence on nuclear carriers as we have — to be the focal point of each of our 15 battle groups. Why is this?

ANSWER: First of all, the Soviets are beginning to place greater reliance on task group operations centered around sea-based aviation. They are currently in the middle of an evolutionary program to attain a carrier capability similar to our own. This effort began with the MOSKVA class helicopter carriers in 1968, continued through the four KIEV class aircraft carriers with a combination of VTOL fighters and helicopters, and will culminate, we believe, with the introduction of their first large deck, nuclear powered conventional take off and landing aircraft carrier by the end of the decade. We have already seen the probable first installment on the Soviet Navy's initial nuclear powered battle group, the KIROV CGN. In fact, we likely would have seen a Soviet nuclear powered aircraft carrier sooner if Stalin's plan to build a blue water Navy had not been scrapped by his successors. With the exception of Stalin's ambitious plan, the Soviets have followed a sequential approach to developing their navy, addressing the most pressing problems first. Since their naval task, to cut the sea access of the West, is very different than ours, which is to maintain the sea access of the essentially maritime free-world alliance, their building program has been quite different. It has taken the U.S. more than sixty years to develop the management capability of the CVN. It will take the Soviets a very long time, if ever, to duplicate it.

QUESTION: Why is their doctrine of seapower so different from ours?

ANSWER: The USSR has traditionally been a continental power that felt compelled to maintain large standing armies. For most of its history, the Soviet Navy has been a defensive adjunct to the Army, tasked with defending maritime frontiers and supporting the flanks of land operations. As a continental power, the Russians saw little need to develop a strategy and capability for controlling extended sea lines of communication or projecting maritime power in distant areas similar to that of island nations like the U.S. and U.K. Over the last two decades, however, we have witnessed an evolution in the Soviets' attitude toward seapower, driven by the increased importance assigned to the strategic strike capability of Soviet sea launched ballistic missiles and by the need to control larger sea areas to counter the capabilities of Western aircraft carriers and ballistic missile submarines. During this same period, the Soviets have also come to realize the utility of naval diplomacy to project Soviet influence in Third World areas. Taken together, these factors have given the Soviets a much greater appreciation of the need for a modern, balanced ocean-going fleet. This appreciation is being translated into an ambitious program to build a sea control/power projection Navy, including their first CTOL nuclear powered aircraft carrier by the end of this decade.

QUESTION: The review of Soviet Military Power published in an unclassified format last year indicates that a nuclear carrier was not projected till the latter part of the decade. Is this still the forecast?

ANSWER: Yes, sir, it is.

TRIDENT II (D-5) MISSILE

QUESTION: The current plan for the Lockheed Trident II (D-5) missile leads to Initial Operational Capability (IOC) in 1989. I understand that the Navy and OSD would prefer to move this date forward by use of "new innovative acquisition management principles." Would you tell us a bit more about your plan?

ANSWER: The plan is still being developed. It appears feasible to accelerate the program. While looking at the acceleration of the missile the Navy is looking at the construction and development plan of the ships. Certain offsetting cost savings may possibly be accrued, to the additional funding required in the early years of the development program, by forward fitting D-5 ships as soon as practical. The program is being structured to include a significant degree of concurrency, pre-planned product improvement, and early Test and Evaluation.

QUESTION: Will the new missile require extensive retrofitting to be compatible with the 15 Trident submarines that we funded through Fiscal Year 1987?

ANSWER: The SSBN 726 Class submarines were designed with space, weight and support system growth capability to accommodate the TRIDENT II (D-5) weapon system. This growth capability was established prior to the initiation of the TRIDENT II (D-5) Weapon System Development. Currently, the missile system is in advanced development and all of the modifications to the submarine which will be required to install the weapon system are not defined. However, as was done in the POLARIS to POSEIDON conversion program, some modification to missile tubes and support systems will be required.

QUESTION: Do you believe that the Trident II missile could be a viable candidate for the Continuous Patrol Aircraft (CPA) mission?

ANSWER: This has never been placed as a requirement on the Navy program therefore the Navy is in no position to comment on this question.

SEAFIRE PROGRAM

QUESTION: The Navy has apparently terminated development efforts for the SEAFIRE fire control system and five inch guided projectile programs and plan to reprogram the funds which were included in the Fiscal Year 1982 Appropriations Act. Why is this?

ANSWER: The recent termination of the SEAFIRE electro-optic fire control system was triggered by a large, unexpected procurement cost increase in the 5" semi-active laser guided projectile (GP) program. This event caused a major review of the requirements for these systems and their relative priority among all Navy RDT&E/acquisition programs. As a result of this review, the programs were terminated for a combination of affordability and priority reasons. The 5" semi-active laser GP technology development will complete in FY 83. Initiation of procurement is not planned.

SEAFIRE/NGFS

QUESTION: The Navy has apparently terminated development efforts for the SEAFIRE control system and five-inch guided projectile programs and plan to reprogram the funds which were included in the fiscal year 1982 Defense Appropriations Act. I am advised that the Marines were quite interested in these programs to support their amphibious operations. Is there something coming along that will take the place of the laser designator contained in the SEAFIRE system?

ANSWER: The Navy is vitally concerned about providing adequate fire support for the Marines during amphibious assaults. However, SEAFIRE--which would require fire support ships to steam very close to hostile coastlines, well within range of enemy guided missiles--is not as effective in illuminating enemy shore targets for guided projectiles as are the Marines' land-based MULEs and illuminators in airborne OV-10A aircraft.

QUESTION: The Navy has apparently terminated development efforts for the SEAFIRE fire control system and five-inch guided projectile programs and plan to reprogram the funds which were included in the fiscal year 1982 Defense Appropriations Act. We were apparently well into completion of the development phase of this effort, and then the program is terminated. How much has been invested in development efforts for these programs?

ANSWER: Development funding to date for SEAFIRE and Five-inch Semi-active Laser Guided Projectile (5" SAL-GP) is as follows:

R&D funds ($ M)	FY 81 and Prior	FY 82
SEAFIRE	36.4	.6
5" SAL-GP	126.0	6.0

AUTOMATIC FLIGHT CONTROL SYSTEM

QUESTION: I believe there has been some movement toward improving the Automatic Flight Control System on the F-4J/S aircraft. These aircraft are programmed to remain in the active forces at least six years and then be provided to the Reserves. Will this effort be funded under the $5.4 million requested for miscellaneous flight safety and operational necessity items in the aircraft modification category?

ANSWER: Over the course of the past several years, consideration has been given to the development of a digital Automatic Flight Control System (AFCS) for the F-4J/S aircraft. While the development and production costs for this effort are relatively modest, it is not of sufficient priority to warrant funding. Given the fiscal constraints within which aircraft modifications are selected, the digital AFCS could only be incorporated at the expense of more critical modifications required in other aircraft types.

QUESTION: What exactly are the problems with the flight control system on these aircraft?

ANSWER: The proposed modification addresses the reliability and maintainability shortcomings in the existing system. These shortcomings derive from the age of the technology involved. There is no question that a system can be produced today which is more reliable and maintainable than the one currently in the F-4. With the replacement for the F-4 being introduced this year, however, digital AFCS does not seem a prudent investment.

QUESTION: Do similar problems exist with the F-4N and the RF-4B aircraft?

ANSWER: AFCS problems in the F-4N and RF-4B are the same as those in the F-4J/S. The AFCS system is common to all Navy F-4 aircraft.

QUESTION: What is the total cost of the number of aircraft we are speaking of that require corrective action?

ANSWER: The cost of the proposed modification has been estimated at $15-18 million for 295 aircraft.

MARINE CORPS HELICOPTER

QUESTION: General Barrow, you have called the development and acquisition of a new medium helicopter your number one priority. Yet this future helicopter will not be available until well into the 1990s. Will the existing fleet of CH-46s and CH-53s carry the Marines until the new helicopter is fielded?

ANSWER: The existing CH-46 and CH-53A/D helicopters, which comprise our assault assets, are inadequate to support our fiscally constrained requirements. The Marine Corps is today deficient in CH-53A/D helicopters and will become deficient in CH-46s in the late 1980s. In the early 1990s the "gap" between this inventory capability and fiscally constrained requirements will become acute. It is, therefore, of prime importance that our future helicopter replacement, which will be developed in the Joint Service Advanced Vertical Lift Aircraft (JVX) program, be fielded in the early 1990s. The nature and extent of our "gap" is dependent on the JVX introduction date. Along with the Navy, we are evaluating a "gap-filler" of off-the-shelf assault helicopters; a decision will be made later this Spring for possible inclusion in our Fiscal Year 1984 budget request.

DEPOT MAINTENANCE BACKLOG

The fiscal year 1983 budget proposes to eliminate the depot maintenance backlog. At the start of fiscal year 1982, the Navy had 16 ships backlogged for overhaul.

QUESTION : Would you say that these ships, as well as the ships programmed for overhaul during fiscal year 1983, can be released from their mission and not have an adverse impact upon your operational requirements?

ANSWER : The Navy currently has 11 ships in the fiscal year 1983 backlog. It is not possible to induct these 11 ships in the fiscal year 1983 overhaul program since they are required to carry-out operational commitments, hence, they were deferred for operational considerations. There is ample shipyard capacity to overhaul the backlog if the ships were available for overhaul.

QUESTION: Isn't it possible that the rapid increase in personnel to reduce the depot maintenance backlog to zero may be wrong?

ANSWER: The projected requirement for 76,335 workers in the public sector for FY 83 is consistent with the projected workload. A rapid increase is not planned nor necessary since there is no intent to bring the backlog to zero in FY 83. Rather, it is planned to reduce the backlog in a gradual manner.

QUESTION: Wouldn't a more gradual reduction in the backlog be more prudent?

ANSWER: It is in fact planned to reduce the backlog in a gradual manner; that is, from 16 in FY 82 to 11 in FY 83, to 5 in FY 85, and 3 in FY 86.

SUBROC

QUESTION: What are your plans for the nuclear anti-submarine warfare mission? The submarine-launched rocket system (SUBROC) is programmed for phaseout, while the ASW Standoff Weapon is still in development. What are your plans to cover this important mission during the interim period?

ANSWER: SUBROC phaseout will take place over an extended period (deleted). We currently have (d) SSN's capable of employing SUBROC, and each will retain that capability until it receives the TOMAHAWK cruise missile capability. (Deleted) SSN's will not be modified for TOMAHAWK and thus will retain the SUBROC capability until they are retired from service (deleted). The new ASW Standoff Weapon, (deleted) is scheduled to achieve an Initial Operational Capability (deleted).

It should be noted that the current SUBROC inventory is limited and decreasing steadily as required to satisfy Department of Energy warhead quality assurance testing requirements and special nuclear material allocation plans. Nevertheless, there will at all times be enough warheads to support SUBROC missile loadouts on all the SSN's retaining the capability to employ them. This ensures that our submarine tactical nuclear ASW mission will be continually supported through the introduction of the new standoff weapon.

SUBROC/ASW STAND-OFF WEAPON

QUESTION: Mr. Secretary, the Committee report accompanying the Fiscal Year 1982 Defense Appropriations Bill requested a report on refurbishment plans for SUBROC and interim requirements. I am concerned that this report has not yet been received. Why does current Navy planning call for phasing out the SUBROC program before a replacement stand-off capability becomes fully available (deleted).

ANSWER: The entire submarine weapon inventory of present and future torpedoes, missiles and mines was considered in determining the Navy's plans.

These plans provide the submarine force with steady overall improvement in weapon flexibility and capability. Those ships losing SUBROC capability will be gaining another new major capability--TOMAHAWK. SUBROC will begin phaseout this year, and the Fleet's SUBROC capability will diminish until phaseout is complete (deleted). The reasons for this phaseout are:

- The SUBROC weapons are well past their design life, which has been extended by means of rocket motor regraining and missile Service Life Extension (SLEP) programs.
- The inventory is limited and will steadily decrease at a minimum rate of (deleted) as required to satisfy the Department of Energy's warhead quality assurance test requirements.
- Further depletion of SUBROC warhead assets, in addition to those lost to DOE testing, will occur as a result of the President's Nuclear Weapons Stockpile Memorandum which controls the allocation of special nuclear material.
- Many SUBROC components employ technology no longer manufactured and logistic support is becoming increasingly difficult.
- The SUBROC employs an analog guidance system which requires unique shipboard interfaces and fire control hardware components. In contrast, the new ASW Standoff Weapon now under development as the successor to SUBROC is an all digital weapon, as are HARPOON, TOMAHAWK and the MK 48 ADCAP torpedo; all these are fully compatible with the modern digital fire control systems being installed in SSNs and require no weapon-unique fire control hardware.
- Part of the space presently occupied in SUBROC-capable submarines by unique SUBROC-related hardware will be reassigned to TOMAHAWK-related equipment when the capability is installed in each ship.
- SUBROC is limited to a tactical nuclear payload. The ASW Standoff Weapon can be configured with either a conventional or nuclear payload, greatly increasing its utility.
- The cost of any further limited extension of Fleet SUBROC capability, beyond that presently provided for, is not considered to be commensurate with the realized gain. Funding of such an effort would necessarily be at the expense of important programs having greater long-term payoff.

QUESTION: What action will the Navy initiate (deleted) in our SSN attack submarines?

ANSWER: (Deleted). At that time (deleted) SSNs of the 594 and 637 classes will still be equipped with SUBROC. A significant Fleet operational capability of the new ASW Standoff Weapon should exist (deleted) when the SUBROC capability is essentially retired.

Although the several reasons cited previously support the present SUBROC phaseout plan as being the most cost-effective approach to the transition to new weapons, the Navy has been investigating a number of other options to further extend the life of SUBROC. The results of this analysis will be forwarded to the Chairman of the Senate and House Appropriations Committees, as requested in their reports on the Fiscal Year 1982 Defense Appropriations Bill, by 1 May 1982.

QUESTION: How long could the Navy's refurbishment plan for SUBROC extend the service life of the weapon?

ANSWER: During FY-1977-1981, (d) SUBROC rocket motors were regrained. The new propellant provided for 15 years additional service life for these motors. The Navy's planned SUBROC refurbishment effort, the Service Life Extension Program (SLEP), will provide comparable quantities of refurbished guidance sections, adaption kits, and igniters, each with nominally 10 years additional service life. Refurbishment of those missile components will begin in FY 1983. Thus, as a minimum, (d) SUBROC missiles, excluding warheads, (several rocket motors have been expended for testing) will be available (deleted). However, the Department of Energy's certification testing requirements and the limitations established by the President's Nuclear Weapons Stockpile Memorandum will act to continually reduce the number of warheads available during these years. There will at all times be enough warheads to support SUBROC missile loadouts on all the SSNs retaining the capability to employ them.

QUESTION: What delays, if any, have occurred in contracting for advanced development of the new ASW/SOW?

ANSWER: Execution of the advanced development contract for this program is contingent upon formal Milestone I approval of the Demonstration and Validation Phase plan by the Defense Systems Acquisition Review Council (DSARC). Presentation of the program to the DSARC has been delayed while the Navy considers a modification, proposed in October 1981, that would extend platform applicability of the ASW/SOW to surface ships. A decision on this proposal is imminent. Meanwhile, work on the transition to advanced development is being performed under the sustaining contract awarded in April 1981 following competitive selection of the development contractor.

QUESTION: At what future date will the Navy be operationally equipped with a new stand-off capability?

ANSWER: The ASW Standoff Weapon will reach Initial Operational Capability (deleted). A significant Fleet operational capability should be attained (deleted).

QUESTION: Has the Navy delayed DSARC I for the new stand-off weapon? If so, please provide information regarding this schedule departure?

ANSWER: During the Concept Formulation Phase, a DSARC I target date of June 1981 was set. This became unattainable because of the cumulative effects of the staffing time, a formal protest of the source selection which was not resolved until July 1981, and a Navy initiative to review the ASW/SOW's applicability to surface launch platforms. DSARC I was accordingly scheduled for 10 November 1981.

Consequent to a significant RDT&E budget reduction incurred by Navy in October 1981, a tentative decision was reached to combine resources then identified for the ASW/SOW and for a surface ship Vertical Launch ASROC (VLA) program. These funds were to continue the existing ASW/SOW program, modified to provide for launch from surface ships having a vertical launch capability. The scheduled DSARC I review was postponed until the proposed combined weapon program could be fully evaluated. Final review of this option is in progress and should lead to rescheduling of the DSARC review for about July 1982.

QUESTION: Does the Navy intend to make the new stand-off weapon compatible with surface combatants? If so, how would any delay in a common SOW affect battle group vulnerability and add significantly to the costs for the surface forces?

ANSWER: Between October 1981 and March 1982, the Navy conducted an in-depth analysis into the feasibility and effectiveness of a standoff weapon that is compatible with both submarines and surface combatants. A decision on this option will be reached in the very near future. The decision process will consider any schedule impacts on the battle group's readiness and vulnerability, as well as costs to the surface forces.

QUESTION: Please provide for the record SUBROC reliability profiles for fleet usage.

ANSWER: SUBROC reliability profiles follow:

(Deleted).

MANNING THE 600-SHIP NAVY

QUESTION: The Navy, during the past year, has improved considerably in accessions and retention of trained personnel. With more ships coming on line leading to the 600-ship fleet, are you confident that the personnel assets will be available to crew these additional ships?

ANSWER: The Navy will have the trained people necessary to man additional ships as they come on line. Total enlisted and officer strength growth associated with the expansion of our fleet will be about 79,000 and 11,000 respectively, from end FY 1982 to end FY 1990. The keys to accomplishing this are compensation competitive with the private sector and effective management initiatives.

First, we need to sustain the momentum established in the 96th and 97th Congresses through pay comparability pay raises. Second, we need your full support for our FY-83 budget request which, among other things, emphasizes alleviating the petty officer shortages in the critical skill areas through our Selective Reenlistment Bonus program. Third, we will need congressional support in the future for the resources we are programming which are targeted at the critically manned petty officer ratings. In addition, extension of the Aviation Officer Continuation Pay will be necessary to fill critical shortages of aviation officers.

The Navy's management initiatives include: growing our delayed entry program recruiting posture; emphasis at the front end of the entry pipeline into specific ratings through the Navy's A school and on-the-job training plans to ensure the proper input into the various skills; balanced reenlistments and forced conversions to insure that the proper balance between skills is maintained.

AV-8B FLEET SUPPORT

QUESTION: The initial procurement of AV-8B Harrier aircraft will begin delivery during the first quarter of Fiscal Year 1984. Are you satisfied that proper steps are under way to assure that maintenance personnel and logistics support measures are available to maintain the aircraft as it is delivered to the fleet?

ANSWER: Concurrent with the procurement of 12 aircraft from McDonnell Douglas the Navy is purchasing:

1) Publication Manuals (Flight/Tactical, Maint/etc.)
2) Peculiar Ground Support Equipment
3) Spare Parts
4) Pre-Operational Support Services
5) Training Equipment

These logistic items will be delivered prior to or concurrent with aircraft deliveries.

In general, logistics support for AV-8B fleet introduction and subsequent operations is programmed and on track. Support requirements are under continuous scrutiny and will be modified when necessary.

RECRUITING AND ADVERTISING

Question: General Barrow, you mention an increase of $7 million in recruiting and advertising to combat "a disturbing drop in market awareness of the Marine Corps." On what basis has this thesis been validated?

Answer: The $7.8 million budget increase is comprised of $4.6 million for recruiting support and $3.2 million for recruitment advertising. To put the advertising increase in perspective, it is important to understand the thrust of our advertising effort.

We have two main programs. The first is the creation of awareness of our enlistment programs through Marine Corps unique advertising, primarily on radio and television. The second, the heart of our marketing effort, is the generation of qualified leads for the recruiter. Leads are generated when the young person mails to the Marine Corps his name, address, and interests on the response cards found either next to our print advertisements in magazines or in direct mail-outs received at home. These two efforts go hand in glove. A reduction in the awareness campaign results in corresponding reductions in the effectiveness of the lead generating effort. The relationship of leads to recruiting success cannot be overstated. A 1981 survey conducted by our marketing agency reported that in a sample of 1061 young men in the Delayed Enlistment Program (DEP), fully 43% had sent in response cards before contacting or being contacted by a recruiter. This is clear evidence of the effectiveness of our Fiscal Year 1981 strategy.

Due to the reduction in advertising funds in Fiscal Year 1982 and associated price increases the Marine Corps has had to forego plans for purchase of television advertising, the most powerful of the unaided awareness media. As a result, the latest surveys indicated that the awareness of the Marine Corps among the target audience has already decreased by 25 percent. Currently, thanks to our previous high level of awareness, a carry-over from

Fiscal Year 1981 advertising, we are experiencing a satisfactory level of lead generation. In the coming months, however, there is no question that the number of leads available to our recruiters will decrease significantly as a result of the presently decreasing unaided awareness.

The measurement of unaided awareness is obtained through a semiannual "Awareness and Attitude Tracking Study" conducted by an independent market research corporation. The data used in this market analysis is obtained by sampling unmarried males in 18 major U.S. markets between the ages of 17 to 24 who have neither served in nor been accepted for service in any branch of the U.S. armed forces. The results are measured against the findings of previous studies conducted semiannually since 1974.

The $3.2 million increase in advertising funds is essential to reestablishing the marketing program which proved so successful in Fiscal Year 1981.

AIRCRAFT PRODUCTION RATES

QUESTION: Mr. Secretary, the Secretary of Defense has stated that weapon systems will be programmed at the most economical production rate. There are two Navy aircraft programs which do not appear to follow this philosophy, the A-6E and the F-14. The A-6E buys are 12 aircraft for Fiscal Years 1981, 1982, and 1985, with eight aircraft in Fiscal Years 1983 and 1984. The F-14 buys are 30 aircraft for Fiscal Years 1981, 1982, 1984 and 1985, with 24 F-14 aircraft for Fiscal Year 1983. Wouldn't it be more economical to buy 12 A-6E aircraft and 30 F-14 aircraft each year? Please discuss this.

ANSWER: From the standpoint of the individual A-6 and F-14 procurement programs alone, it would be more economical to buy these aircraft at a level rate. While procurement of 12 A-6Es and 30 F-14s per year is preferred, budgetary constraints have necessitated a reduction in A-6 and F-14 procurement. The Navy's overall FY 1983 aircraft procurement plan represents the best balance achievable among many important aircraft programs.

F-14 EMPLOYMENT

QUESTION: I understand the Navy now plans to buy additional F-14 Tomcat aircraft to arm all the large-deck carriers with the F-14 in the fighter role. At the same time, the F-18 buy will remain at 1,377 aircraft but the F-18 will only be assigned in the fighter role on small-deck carriers and in Reserve units. Can you discuss the elements that were involved in this decision?

ANSWER: It is true that the Navy plans F-14 procurement sufficient to equip all large deck carriers with two squadrons. Our commitment and experience in the Indian Ocean and the improvement in Soviet bomber ECM capability dictate the need for such an F-14/PHOENIX missile force. All large deck carriers will also have two squadrons of F/A-18s. The HORNET will be used in the air-to-air role to augment F-14 capability as well as in the traditional light attack air-to-ground role. This mix of F-14s and F/A-18s in addition to the current A-6 force will provide an operational flexibility and an offensive and defensive combat capability essential to the environment expected to exist in the late 1980's and beyond.

A Naval and Marine reserve modernization initiative is being undertaken to increase the capability, and commonality of reserve and regular forces. Introduction of the F/A-18 to Naval or Marine reserve forces at an early time is one element in this initiative.

The F/A-18 procurement objective is summarized as follows:

Force Element	Number Squadrons	Authorized Aircraft	Planned Procurement
USMC VMFA	12	144	248
USN VF	4	48	75
USN VA	30	360	686
USN VFP	1	45	76
USMC VMFP	1	21	36
USMC TACA	1	30	45
USNR VF	4	48	63
USNR VA	6	72	93
USNR VFP	2	8	12
USMCR VMFA	2	24	32
Development	0	11	11
TOTAL		811	1377

In addition to squadron authorized aircraft, the planned procurement includes pipeline, attrition and training aircraft.

AV-8B

QUESTION: General Barrow, could you indicate a preference between the F-18 and AV-8B in the close-air support role to Marine Amphibious Forces?

ANSWER: We have chosen to modernize our fighter/attack community with the F/A-18. This aircraft, procured primarily as an air superiority fighter, has a significant air-to-ground capability, and as required, will augment the light and all weather attack communities with about 25 percent of its missions. This is nothing new. We have successfully used the F-4 Phantom in a similar dual role for a number of years. I might add that, with its integrated Radar, Forward Looking Infra-Red (FLIR) Sensor and Laser Spot Tracker (LST) capabilities, the F/A-18 will be much better (vis-a-vis the F-4) to continue to attack during conditions of adverse weather.

On the other hand, we prefer to equip our light attack force with the much smaller and highly deployable AV-8B. This aircraft has been designed from the "keel up" to provide responsive and accurate close air support (CAS) to our Marines on the ground. This primary mission role is enhanced by the AV-8B's capability to be based forward, in close proximity to the ground commander, and by its first pass attack and high kill probability provided by the extremely accurate and "passive" Angle Rate Bombing System (ARBS). The employment concept for AV-8B is not new. We have more than a decade of successful operational experience on which to base our preference. We know the concept to be sound. The AV-8B is optimized for the close air support role. It is significant that with the 25mm gun system, precision guided weapons and Sidewinders, the AV-8B will be capable of self-protection and will possess a very respectable point air defense capability.

The distinction I have made between these two aircraft is to show that clearly neither the F/A-18 nor the AV-8B is capable of performing the primary role of the other.

Therefore, in response to your question concerning the close air support role to Marine Amphibious forces, the AV-8B is the only aircraft capable of performing this role.

The Marine Corps needs both aircraft, and views them as complimentary weapons systems, both of which are essential to the modernization of Marine Corps Aviation.

SUBCOMMITTEE RECESS

Senator STENNIS. The subcommittee will stand in recess until Wednesday, March 31, at 9 a.m., when we will receive testimony on the MX programs.

[Whereupon, at 11:05 a.m., Thursday, March 25, the subcommittee was recessed to reconvene at 9 a.m., Wednesday, March 31.]

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